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ABSTRACT

This collection of papers, the seventh in an annual series, presents views of members of the Professional and Organizational Development Network in Higher Education on classroom research, the fostering of student inquiry, the realities and possibilities of academic life, and the training and support of academic professionals. Articles and authors are as follows: "Project Learn: Encouraging Innovation and Professional Growth Through Classroom Research" (Kate Brooks); "Notes on a Classroom Research Program" (Bette LaSere Erickson, Glenn R. Erickson); "Art Essays and Computer Letters" (Wendy Holmes); "Alternatives for Evaluating the Death Education Student" (J. Eugene Knott); "Evaluating Structured Group Activities for the Large Class" (John Stevenson); "Undergraduate Students' Use of Time: A Classroom Investigation" (Barbara E. Brittingham); "Weekly Quizzes and Examination Performance in Intermediate Accounting" (Joseph Matoney); "Student Styles and Learning in Two College of Business Courses" (Blair Lord); "Improving Teaching by Reflecting on Practice" (Ron Smith, Fred Schwartz); "Using Field Methods as an Instructional Tool" (Donald H. Wulff, Jody D. Nyquist); "Topics in Question: Active Learning through Inquiry" (Susan Lundvall Brodie); "Assessing Faculty Quality of Life" (Jon Hageseth, Sally Atkins); "Satisfactions and Concerns of New University Teachers" (Mary Deane Sorcinelli); "Helping Faculty Meet New Pressures for Scholarly Writing" (Robert Boice); "On Being a Faculty Member or Things Your Dissertaton Adviser Never Told You" (Richard Thompson, Jim Turner, Robert Boice); "The Washington Center: A Grass Roots Approach to Faculty Development and Curricular Reform" (Barbara Leigh Smith); "Collaborating with Departmental TA Coordinators: The Next Step?" (Nancy Chism); "Practices Used by Excellent Department Chairs to Enhance the Growth and Development of Faculty" (Myra Wilhite, Anita Leininger); "Developing Management Skills of Academic Professionals" (Len Ainsworth). References follow articles. Contains an author and title index. (GLR)

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To Improve the Academy

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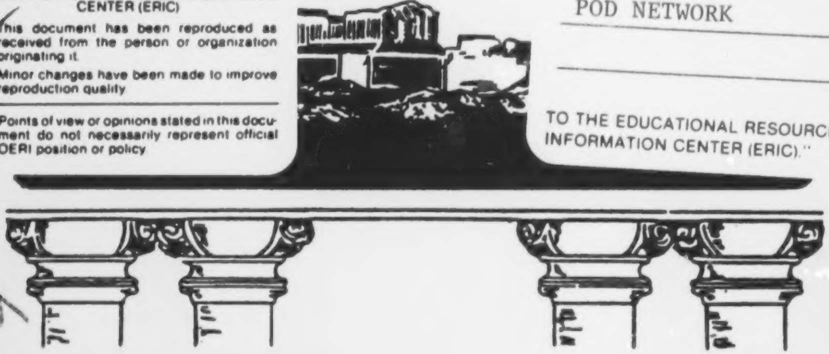

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Volume 7, 1988

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Foreword

To *Improve the Academy* is a collection of essays written by members and supporters of the Professional and Organizational Development Network in Higher Education (POD). Now in its seventh edition, *To Improve the Academy* affirms the quality, diversity, and vitality of professional development practice in higher education today.

Nationally, the proliferation of commission reports, conferences, and publications on teaching and faculty vitality attests to growing concern about the quality of teaching and the context in which teaching and learning take place. For fifteen years POD has been a resource for faculty members and administrators who want to make teaching, learning, and academic life more effective and fulfilling.

POD members meet each year in October for stimulation and support. We have found that much can be accomplished when we share freely what we are learning. For this reason, we do not copyright any of the articles we publish. Instead, we invite you to reproduce and use the material in this volume. We ask only that you credit the authors and the source. We hope also that you will communicate your thoughts in response to these articles to the authors and editors – perhaps at a POD conference in the future.

If you are not already a member of POD, we hope you will consider joining. The POD network provides an excellent way to keep in touch with academic professionals who value quality education and appreciate collaboration and mutual support.

Finally, we encourage you to submit a proposal for our next conference or a manuscript for possible inclusion in the next edition of this series. All submissions are reviewed "blind"; you do not have to be a member to sumbit. We are committed to providing publication outlets so that excellence in faculty and institutional development practice can be recognized and shared.

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Part I CLASSROOM RESEARCH

At the 1987 POD meeting, Pat Cross challenged us to discover what could be learned by encouraging faculty to become researchers in their own classrooms, answering their own questions empirically, whether through formal or informal investigations. Classroom research is not new to POD members as previous editions of this volume attest. In characteristic POD fashion, several of our members stepped up their efforts in response to Cross's challenge. The results of their inquiries are presented here.

"Project Learn" describes a POD-funded program involving seven faculty members who identified their students' learning styles, then devised, implemented, and tested alternative teaching strategies to address their students needs. The University of Rhode Island project brought together a group of faculty who had already "graduated" from the regular URI faculty development program and who were in search of a new way to think about their teaching. The diversity of their projects is enhanced by their honest assessments of the benefits as well as the problems that arise when faculty engage in classroom research.

Finally, Ron Smith and Fred Schwartz provide an inside look at a very intense moment of self-disclosure and self-discovery by a teacher exploring her relationship with a student. The care and detail of their analysis admittedly make it a challenge to read. Using Argyris and Schon's model of the reflective practitioner, they illustrate how unarticulated, untested assumptions can be surfaced through dialogue so that their role in practice – and their implications for personal integrity – can be revealed.

Project Learn: Encouraging Innovation and Professional Growth through Classroom Research

Kate Brooks
Los Medanos College

Introduction

Classroom research in community colleges is an idea whose time has come. It offers a potentially powerful tool for informing faculty of who their students are, how they learn best and what teaching strategies are most effective. When undertaken by a group of faculty together and focused on the goal of instructional redesign, it encourages and supports classroom innovation.

Classroom research is, of course, not a new phenomenon. It has been going on for as long as concerned teachers have sought feedback from their students. What may be new is the idea that the instructor should become an avid, systematic researcher of the teaching/learning process in his or her classroom. The goal is not to formulate general rules, but to gain specific insights into how to teach a particular subject to a particular group of students more effectively. Demographics indicate that the sociological mix in our classrooms will only become more diverse, yet expectations of what teachers should accomplish are rising; in this atmosphere a tool that

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aids in the improvement of individual learning experiences should be especially welcomed.

Faculty can be revitalized by refocusing their attention on how students learn; in a sense, they become students again themselves. After many years of teaching, faculty often lose the habit of seeking student evaluations, and may find threatening the thought of reviving a student evaluation process. Undertaking a classroom research project can cut through this lethargy and fear and re-ignite a spark of curiosity. By asking students to help in determining how they learn in specific situations, the evaluation process can be lifted above subjective judgments of how "good" or "bad" a teacher is. It opens a new type of dialogue in which both teachers and students share the realization that there are many different kinds of learners and many reasons for student success or failure beyond how "good" or "bad" the student is. Instructors have felt the classroom atmosphere tangibly improve once students understood the spirit and goals of Project Learn.

Origin and Design of Project Learn

Project Learn grew out of a partnership between an astronomy instructor (the author) and the learning specialist in language arts at our college. Curious to learn why the introductory astronomy course was so difficult for some students, the learning specialist sat in on one class session. She commented afterward, "I didn't understand a single thing you said." The instructor swallowed hard, but it was information she needed to hear. Surely the learning specialist wasn't alone, even among students who had been attending from the beginning of the course. It was clear the instructor had much to learn.

Thus began an ongoing program of investigating the factors that affect success for the groups of students who make their way through introductory astronomy. The initial focus on cognitive skills specific to astronomy later widened to include learning styles, motivation, situational and physical factors, and a host of skills, attitudes, and habits related to the learning process. Rather than searching the literature for generalizations about how these factors relate to success, the learning specialist and instructor decided to let the program evolve on its own, guided by the students and their own best sense of what to do next. The two initial steps were clear: first, they would learn more about the skills, learning styles, and habits of the students and the skills required by the subject. Second, they would incorporate that understanding into the revision of teaching strategies, with the aim of improving learning.

As the program has evolved over two years, it has passed through three major phases, from initial exploration to full-blown implementation of seven grant-supported "research and redesign" projects involving ten percent of our faculty. The final phase drew faculty from a wide range of disciplines – history, social science, biology, astronomy, English literature, computer science, and math – and involved introductory-level courses meeting general education or A.A. degree requirements. None of the participating faculty were experienced in formal educational research, and the research approach throughout has been exploratory, action-oriented, and collectively planned and conducted. A cohesive spirit characterized the group, due in part to previous involvement in staff development programs and the strong tradition of interdisciplinary curriculum development and in-service training which has distinguished Los Medanos College from its inception.

After reviewing the exploratory stages, the following section presents findings from the research projects focusing only on students in the astronomy course. A description of the design and implementation of the expanded grant project follows. The final section discusses the limitations and significance of the results and explores the future development of this kind of project.

Phase I. Pilot Study (Spring and Fall 1986)

For two semesters, the learning specialist and the astronomy instructor conducted research on 110 students who took introductory astronomy. The approach was to identify skills and factors affecting success, assess students for these factors, and compare the results with final grades. An understanding of the learning-related factors that discriminated between high and low achievers could then be used to guide the revision of teaching strategies.

Procedures and Results: First Semester

During the first semester, 46 students, responding to a questionnaire, identified factors affecting their success in the course. At the end of the semester, the learning specialist developed a profile of "the student who succeeds in astronomy" through interviews with the instructor, the peer tutor, and a student group of five high achievers (earning final grades of A or B) and five low achievers (earning final grades of D or F). She also gave a battery of standard tests to the small group of high and low achievers, assessing them for verbal and broad cognitive ability, reasoning and visual skills. Ability in visual tasks might be important in astronomy, with its emphasis on visual subject matter.

Results showed that motivation, reasoning and verbal ability were high in all of the A/B students and low in almost all of the D/F students. Notable exceptions were that two D/F students scored high in reasoning, and one scored high in verbal ability. In a surprising reversal of our expectations, all the D/F students, but only one A/B student, scored high on the test for perceptual speed in visual tasks. The instructor, the peer tutor, and both student groups all noted the same characteristics of successful students: (a) good study and notetaking skills, (b) attendance, (c) ability to visualize, observe and "put it all together," and (d) persistence in keeping up with the work. These initial results, revealing student focus on factors other than cognitive abilities and a lack of correlation between grades and cognitive abilities in notable individual cases, led next to an exploration of a broader range of success factors.

Procedures and Results: Second Semester

In the second semester, the learning specialist developed and administered to 64 astronomy students a new instrument, the "Self-Assessment: Learning Profile," which posed questions in each of the following categories:

(a) motivation, attitudes, and values
(b) situational factors (job, family responsibilities)
(c) background in math and science
(d) physical factors
(e) study skills, attitudes
(f) verbal skills
(g) learning style orientation (instructor, peer, self)
(h) learning style modality or mode (visual, auditory, tactile-kinesthetic)
(i) learning style: hemisphericity (right or left brain dominance)
(j) accessing skills
(k) processing skills
(l) expressing skills

She assessed 46 students for learning style modality with a second instrument, "The Learning Style Inventory" (Nikhazy/Stein), which separates the visual mode into verbal and nonverbal styles (Nikhazy and Stein, 1986). The verbal/nonverbal distinction in the visual mode may be important in astronomy, in which spatial visualization is a key skill. The learning specialist also audited one full unit (three weeks) of the course for first-hand observation of how the above factors operated in the classroom and course assignments.

Comparison of final course grades with student responses on the above assessments yielded the following results. Grades showed no relation to student motivation and expectations in taking the course. (Research in the previous semester showed, in contrast, that motivation was different in high and low achievers; in that case, however, students responded to questions about motivation after receiving the final grade.) Grades also showed no relation to the frequency with which situational factors (job, family responsibilities, and workload in other courses) interfered with the accomplishment of course tasks. On the other hand, grades showed a definite relation to the following:

(a) grades earned in previous math and science courses
(b) the number of previous math and science courses taken
(c) study skills
(d) vocabulary and writing skills
(e) preference for studying alone (strongest in A students)
(f) willingness to ask questions in class
(g) notetaking ability
(h) preference for essay over multiple choice tests (stronger for A students)
(i) comfort in giving oral reports (greater for students earning higher grades)

Two factors were important for all students, regardless of grade earned: physical problems and difficulty in listening to lectures longer than 30 minutes.

Trends also emerged from the data on student learning styles. "A" students showed a slightly stronger preference for the visual verbal and tactile-kinesthetic modes but a slightly weaker preference for the auditory mode than students who earned lower grades. More importantly, forty percent of all students tested had a dominant mode (so defined as having the score for one mode exceed the others by at least the average of the standard deviations for all modes). Twenty-seven percent of the students tested showed a strong preference for the visual mode, twenty percent preferring the visual nonverbal mode in particular. With respect to hemisphericity, "left-brained" students averaged slightly higher grades than "right-brained" students. The grade point average was 2.4 for students with a strong left dominance and one-half a letter grade lower (1.9) for right-dominant students.

Conclusions from Phase I

A few clear results emerged as guidelines for future revision of strategies. Breaking up lectures longer than 30 minutes with participatory exercises and activities would help one-fourth to one-half of the students in the class. Addressing physical problems with more sensitivity would also help at least one-fourth of the students. Both classwork and homework could be modified to accommodate students who prefer to study with friends. Poor performers might benefit from reinforcement of study and notetaking skills and practice in "pulling it all together" in essay questions. At Los Medanos College, the peer tutoring program offers the best avenue for skill reinforcement for poor performers, although they would also benefit from a classroom climate that better stimulates and maintains their interest and encourages them to ask questions. Clearly, at least one-fourth of the students (those with a dominant visual learning mode) might learn more easily if provided with visual aids.

Phase II. Data Collection in Additional Courses and Design of Classroom Research Process (Spring 1987)

With a bank of data now growing, and strategy revisions emerging from our study, it was time to tell others of the results and invite them to participate. Six additional faculty members chose to join the two researchers and apply for a POD grant to fund research projects in their courses. Receipt of the grant was of enormous help at this time, for it provided funds to hire student research assistants for data tabulation and to offer small stipends to participating faculty. In a semester devoted to planning, the group collected data in additional courses and met bi-weekly to discuss the implications of the data for improvement of instruction and the ways each participant planned to implement the research process.

Additional Data Collection

Most faculty chose to research student learning styles, in particular, the learning mode or the "Kolb" learning style (Kolb, 1984). Interest in the Kolb style arose partly because special teaching strategies existed that targeted each type (McCarthy, 1980; Samples, Hammond and McCarthy, 1985).

One hundred fifty-nine students, in one math and three science courses, took learning mode assessments. Of these, 88 preferred to learn through one or two dominant modalities. Calculations of mean grades for students with the same dominant modality yielded the results shown in Table 1. While mean grade differences between the modes are not impressive, two trends found earlier repeat themselves: auditory learners earn lower grades (at least in science and math courses), and most students are visual learners, specifically in the nonverbal mode. Students who had two outstanding preferred modes earned the highest mean grades, except where neither of those two modes was visual-verbal or auditory. The numbers were not large enough to render this result significant, however.

A strong relationship existed between grades and the Kolb Learning Styles. In Kolb's formulation, people take in information primarily through concrete experience (CE) or abstract conceptualization (AC).

TABLE 1
Mean Grades for Students of Different Learning Style Modes

Mode	Number of Students	Mean Grade (4 = A,3 = B,2 = C,1 = D,0 = F)
Visual Verbal	12	3.17 ± 1.19
Visual Nonverbal	48	2.88 ± 1.73
Auditory	9	2.50 ± 1.42
Visual Tactile-Kinesthetic	10	3.10 ± 0.99
Visual Nonverbal/Auditory	5	3.60 ± 0.55
Visual Verbal/ Visual Nonverbal	4	3.75 ± 0.50
Visual Nonverbal/ Visual Tactile Kinesthetic	6	2.50 ± 1.52
Visual Verbal/Auditory	1	4.00 ± 0.00
Visual Verbal/ Visual Tactile Kinesthetic	2	3.00 ± 1.41

TABLE 2
Mean Final Grades for Students of Different Kolb Learning Styles

Kolb Type	Number of Students	Mean Grades (4 = A,3 = B,2 = C,1 = D,0 = F)
Diverger	22	2.46 ± 1.14
Assimilator	49	3.67 ± 2.10
Converger	11	3.55 ± 2.50
Accommodator	14	1.92 ± 1.50

Processing styles range from reflective observation (RO) to active experimentation (AE). Combining accessing and processing styles yields four learning types: (a) divergers, who combine concrete experience with reflective observation, (b) assimilators, who combine reflective observation with abstract conceptualization, (c) convergers, who combine abstract conceptualization with active experimentation, (d) accommodators, who combine active experimentation with concrete experience (Kolb, 1984).

Ninety-six students in astronomy, intermediate algebra, anatomy/physiology, and literature courses took assessments for the Kolb style. Styles related to final grades, as shown in Table 2. The results clearly indicate that students who learn best through logical reasoning (assimilators and convergers) earn the highest grades, which is hardly surprising considering the stress on cognitive skill mastery in our educational system. Forty percent of all students do not learn best through lectures about concepts. Reaching all students requires that, at least in part, an instructor present material through concrete, personalized experiences and discussion of value questions.

The Five-Step Research Process

Learning style assessments were the first level of research in Project Learn, whose ultimate goal was improvement of instruction. The plan of action for translating the initial research findings into redesigned instruction involved in a five-step process, which can be summarized by posing the essential question each step sought to answer:

Step 1. How do the students learn?
Step 2. What do they need to know or be able to do to
succeed in a particular unit of instruction?
Step 3. How and how well does the instructor currently teach the
selected unit?
Step 4. How should the instructor redesign the unit?
Step 5. Do the redesigned strategies work better?

The specific tasks of each step were as follows:

Step 1. Assess students, the course tutor, the research assistant and the instructor for any or all of the following: (a) Kolb learning style, (b) learning modality (visual verbal and nonverbal, auditory, tactile-kinesthetic), (c) learning style orientation (instructor, self, tutor), (d) hemisphericity, (e) situational and physical factors, (f) other student characteristics. (Although not all faculty chose to focus on learning style, all gave at least one assessment to help build the data base.)

Step 2. Select a unit in the course and, with the help of a fellow instructor and/or the student research assistant, identify factors leading to student success in mastering the course material. Focus might be on one or more of the following: (a) proficiency in the cognitive skills required by the discipline, (b) other skills assumed, consciously or unconsciously, by instructor assignments and behavior, (c) other student characteristics that have impact on learning success: motivation, skills in accessing, processing and expressing.

Step 3. Analyze and evaluate current teaching methods in the unit. Students, as well as the course tutor and/or research assistant should be active participants.

Step 4. Redesign and teach a unit that incorporates the finding in Steps 1-3.

Step 5. Evaluate student learning in the redesigned unit and compare the results with evaluations in the original unit (in a control section in either the same or a previous semester). Measures of improved learning should be grades on unit tests and assignments and student questionnaire responses.

Phase III. Implementation of Seven Faculty Projects (Fall 1987)

Faculty from seven disciplines implemented "research and redesign" projects the following semester. Instructors in social science (American Institutions and Ideals), Biology and Health, Introduction to Computer Science, and U.S. History all devised strategies to teach visual learners more effectively. More successful development of the thinking skill of "synthesis" was the goal in projects in a literature course and, again, in the U.S. History course. Astronomy and algebra instructors revised methods to follow the Kolb cycle and target each Kolb type in turn. The learning specialist served as a consultant, advising other faculty on redesign of classroom methods to accommodate students of different learning styles.

In monthly meetings participating faculty reported to each other on their progress and discussed the selection of units for redesign, relevance of the learning style data, self-evaluation of their teaching methods and the development of new strategies. Faculty members also met in pairs for more in-depth mutual consultation on lesson design and, in several instances, visited each other's classes to observe the revised strategies at work.

Table 3 summarizes the seven projects: course title, number of students and course sections, learning style elements assessed, units selected

TABLE 3
Summary of Individual Faculty Projects

	I. PROJECTS ACCOMMODATING VISUAL LEARNING STYLES			II. PROJECTS FOCUSING ON A SPECIFIC THINKING SKILL (SYNTHESIS)		III. PROJECTS ACCOMMODATING KOLB LEARNING STYLES	
COURSES	SOCIAL SCIENCE	BIOLOGY & HEALTH	INTRODUCTION TO COMPUTERS	U.S. HISTORY	LITERATURE	INTERMEDIATE ALGEBRA	INTRODUCTION TO ASTRONOMY
SECTIONS	3	2	2	3	1	1	2
NO. OF STUDENTS	89	42	65	75	13	26	44
STEP 1 **Assessments Given**	Modality	Modality Hemisphericity	Modality	Modality	Modality, Kolb Hemisphericity	Modality, Kolb	Modality, Kolb Hemisphericity
STEP 2 **Unit Selection**	Electoral College	Communicable Diseases	Storage Devices & File Processing	Civil War Reconstruction Period	Poetry	Graphing Quadratic Equations	Sun & Stars: Life Cycle of a Star
STEP 3 **Current Methods**	Straight lecture	Straight lecture with visual aids (overheads)	Straight lecture	Straight lecture	Lecture / Discussion	Lecture; Group Homework & in-class problems	Lecture Audio tape / slides
STEP 4 **Nature of Revision**	Increased utilization of visual aids	Group work; student presentations of content; use of color-coded cards, posters	Group work; visual mapping of chapter; student oral presentations	Portrayal of Civil War conditions by guest actor; use of film strips, videos	Varied participatory activities to develop ability to synthesize and appreciate a poem's full message	Inclusion of examples from life; fun, practical applications	Group work on stellar evolution; personalized approach to stars
STEP 5 **Evaluation of Learning in the Revised Unit by Student Grades**	One-half a letter grade improvement	Whole letter grade improvement	No grade difference	Whole letter grade improvement	One-half a letter grade improvement	Final exam question scores on revised material one whole letter grade higher than exam scores on unrevised unit	Whole letter grade improvement

for redesign, original and revised strategies and grade differentials as a measure of learning improvement.

In six out of the seven projects, grades were higher in the experimental section (or part of the course), in one case by as much as one-and-a-half letter grades. Students evaluated revised methods by questionnaire also. They generally reported positive experiences, many noting that the more usual lecture classes hindered their learning. In particular, many reacted positively to the more varied methods employed in our experiments – small group work, hands-on learning, dramatic presentations, visual aids and others. In one notable exception, a small group mapping exercise, student reaction was not generally positive and grades did not improve. In retrospect, the instructor felt that students were inadequately prepared, both for the change and the particular group assignment given.

Four faculty members noted an improved climate, even a greater sense of bonding, in the class after the experiment. One noted, "The classroom atmosphere was markedly more spirited." Another instructor commented, "There is no question that the strategy worked. The visual aids and dramatization have obvious appeal and enhanced student interest level and morale."

Interpretation of Results

Effectiveness of Specific Strategies

Did Project Learn faculty accommodate learning styles and teach the skill of synthesis more effectively? Grades and student questionnaires in most cases definitely reflected improved learning, but careful interpretation of the results is necessary. Other factors clearly came into play.

The effect of change itself probably enhanced student attentiveness and response. Even when faculty did not announce to their classes that they were trying something new, instructors felt that they were either more organized than usual or subtly conveyed a sense of anticipation and enthusiasm. One way or another, students realized that something different was happening, which may have made them more open to learning. One instructor noted, "Students felt more interested because I was doing all this testing and experimenting."

Faculty were often aware of significant differences between the experimental and control sections or units. Even though comparison of grades on similarly taught units should theoretically compensate by measuring "intrinsic" differences, questions nevertheless remained about the validity of the controls. Students in the experimental literature class were generally more skilled and enthusiastic than the previous semester "control" students and averaged a whole letter grade higher in final course grades. They had a greater sense of rapport, perhaps due to field trips and out-of-class activities. The algebra instructor also questioned the validity of the controls, since performance on different material was compared. Faculty noted a number of additional factors that might have influenced results, such as time of day, "chemistry" of classes, length of class sessions, and proportion of different learning types. Faculty awareness of such issues is actually a benefit of this type of on-site research, where practitioners can isolate factors affecting the results.

In several cases, the redesign involved more than one change in strategy, and the data cannot clearly separate the effects of each. Multiple strategy revisions occurred in all experiments targeting visual learners. In the social science and history courses, more time was spent on the unit, although this was true for all sections. The experiments in biology and computer science introduced small group activities, thereby addressing both the sociological and modality elements of learning style. A visual mapping exercise in the computer science course involved a rather sophisticated technique, new to most students.

If proving the effectiveness of strategies which accommodate learning styles were the only goal, Project Learn was not a definite success. Improved learning occurred, but the reasons are not clear. A deeper analysis of the data on grades may yield more insights. Only one instructor, for instance, determined mean grades for students identified by learning style. On the open-ended, follow-up questionnaire not all faculty were comfortable asking for names or social security numbers of students. Thus, in most cases, the questionnaire responses cannot be analyzed by learning style groups, but only for the class as a whole.

Faculty reluctance to have students identify themselves highlights another limitation of this type of research, or at least an aspect that must be handled sensitively. Ethical questions arise in the minds of the faculty regarding student privacy and the unequal treatment of different sections. This is probably an unavoidable phenomenon when the instructor is also the researcher, and each practitioner must decide if the final goal of improved learning for the majority is worth the present risk of sacrificing improved learning for some.

Effectiveness in Encouraging Faculty Development

Did the project stimulate innovation and professional growth among the faculty? In this goal, the project was an unqualified success. Positive effects noted by participating faculty were the sense of discovery and excitement in trying new methods, a readiness to continue innovating, and the sense of trust and bonding in the group that arose from mutual support and assistance. Faculty noted also a greater awareness of (a) the many factors affecting learning, (b) the need for greater organization and efficiency in the classroom, (c) their unconscious expectations of students, and (d) the importance of learning styles – both the instructor's and the students'. One participant found the project "fun, stimulating, and useful," even if the results were not apparently positive. Another commented that she wanted to "re-examine and reshape" methods "thanks to the impetus of Project Learn."

All participating faculty chose to continue the process, and others expressed interest in future involvement. Four participants extended the new methods to at least one additional unit, and two stated their intention of revising an entire course. For one, "Project Learn started a process for me... I will continue to revise units in all my classes." One instructor immediately carried out a second project – researching the effectiveness of different testing methods – and then revised testing procedures in an entire course.

All seven faculty expressed the desire to study future classes, five of them in the next academic year. Five also hoped to continue meeting as a group. One instructor commented, "The opportunity to share curriculum as well as creative approaches to teaching is a real treasure." Eight additional faculty indicated an interest in implementing research projects, and five other colleges have requested presentations about Project Learn.

Future Development of Classroom Research

Several lessons from Project Learn should guide the implementation of classroom research in the future. First, such work definitely engages faculty, enhances their understanding of the learning process and encourages them to continue trying new methods. Second, faculty find it satisfying to see significant results. For this reason, project directors and participants should carefully design and monitor projects to achieve clear results. Third, faculty benefit from working together as a collaborative team. Mutual support sustains motivation, and each participant draws from the creativity of several minds in redesigning instruction and interpreting results. Faculty jointly "own" all phases of the project, from conception to implementation to interpretation. Engaging together in the expanded role of teacher-as-researcher promotes new norm-building and reinforces key values in the profession. Fourth, it is a great help to have grant support, not so much for financial reasons, but for assistance in data compilation and as an incentive to follow through and complete the projects. Faculty at our college are involved in many extra-teaching responsibilities which drain their precious time and energy. The recognition and impetus offered by a formal grant definitely helped to move the project along.

If interest in classroom research continues to gain momentum, faculty developers must find ways to expand experimental efforts such as Project Learn into on-going programs involving larger numbers of faculty. Grant support will probably be necessary both to inform faculty about what is involved and then to engage and support them in fruitful projects. If enough faculty find the results interesting and the effort worthwhile, they may begin to develop the research "habit." When the next generation of instructors comes along, classroom research can become an integral part of in-service training programs. In this way, a new role will evolve for instructors – that of researchers who constantly examine the interplay of teaching strategies, subject matter, and learner characteristics. The process can only enhance and deepen their understanding of what they really do as teachers.

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Notes

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2. Faculty participating in the POD grant project were: Kate Brooks (Instructor of Physical Science), Diane Downie (Instructor of Mathematics), Pat Gregorio (Instructor of Language Arts), Don Kaiper (Instructor of Social Science), Barbara Mahler (Instructor of Computer Science), Nancy Nikhazy (Learning Specialist in Language

Arts), Carmen Rodriguez (Instructor of Social Science) and Mary Jo Starsiak (Instructor of Biological Science).

3. The author would like to thank Pat Gregorio for assistance in editing the manuscript.

Notes on a Classroom Research Program

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Sometimes, when you least expect it, a good idea stands up, introduces itself, and asks to be recognized. So it happened two years ago at the AAHE meetings. Pat Cross was urging us all to take teaching seriously – not a particularly novel idea for POD folks – but we sat up and took notice when she proposed:

> What is needed if higher education is to move toward our goal of maximum student learning is a new breed of college teacher that I shall call a Classroom Researcher. A Classroom Researcher is one who uses the classroom as a laboratory, collecting data and using a variety of research methodologies appropriate to the study of teaching and learning in his or her particular discipline. (Cross, 1986a, p. 10).

Classroom research sounded like an idea worth knowing better, so the POD Network asked Pat Cross to elaborate what she had in mind at their national conference later that year. "The purpose of classroom research," she explained, "is to help the teacher evaluate his or her effectiveness as a teacher and to foster intellectual stimulation and professional renewal for college teachers" (1986b, p. 12). Traditional educational research searches for effective teaching and learning practices that are generalizeable across classrooms; classroom research seeks answers to situation-specific questions that faculty have. "The procedure of the classroom researcher is to formulate the question, collect data, reflect on classroom practices, try a solution, and evaluate the results" (1986b, p. 13-14).

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The procedures for classroom research sounded similar to activities we undertake in consultations with faculty, but the emphasis upon seeking answers to the questions faculty raise is a different agenda than most of us pursue when we're working with faculty to improve their teaching. Classroom research seemed like an idea worth trying out.

For the Instructional Development Program at the University of Rhode Island, classroom research offered focus and direction for a program we had been struggling to develop. For ten years, we had offered what we call the Teaching Fellows Program – a collection of activities that includes a week-long course planning workshop, a seminar that meets every other week during the academic year, and the individual consultation that is the cornerstone of our services. Each year, the Teaching Fellows Program provides an opportunity for 12 to 15 faculty to catch up on the research on college teaching and learning, to explore a variety of teaching methods, to try some of them in their classes, and to meet regularly to exchange ideas and strategies. It's an intensive program and a continuing one, so it's not surprising that faculty come to depend on it for ideas, support, and energy. Nor is it surprising that when the year concludes, faculty begin to miss the stimulation, the cameraderie, and the regularity of informed conversations about teaching.

By 1986, about 125 faculty had participated in the Fellows Program, and calls for a follow-up program were becoming louder. We had not responded to those requests, because we had not found a focus or structure or something that could be regarded as a *raison d'etre*. Classroom research seemed like a promising possibility. Early in 1987, we decided to give it a try by sending an invitation briefly describing our intentions to the 100 Teaching Fellows still at URI. When all was said and done, some 20 faculty were signed up for a Classroom Research Program.

We had the faculty and we had a theme, but we didn't have much beyond that. Truth be told, we weren't altogether sure what classroom research was – that is, how it differed from our other activities – much less how we were going to encourage it. Fortunately, faculty came to the organizational meeting that spring with some ideas for the program. Indeed, a few had classroom research projects planned and about ready to conduct in the fall. Most of the others had questions that could be transformed into research projects. We agreed to meet roughly once a month during the 1987-88 academic year and to regard the fall semester as the time to plan classroom research projects which would then be carried out during the spring semester.

During the summer and throughout the fall semester, we met with faculty individually to plan their research projects. In addition, we held four seminar meetings organized around the following topics: (1) collecting data about learning styles; (2) measuring stages of student development; (3) assessing student learning; (4) designs for research on classroom practice. Lest this seem an odd collection of topics around which to build a seminar on classroom research, keep in mind that these faculty were not new to the idea of viewing their classrooms as laboratories. All had participated in the Teaching Fellows Program, so they were accustomed to experimenting with different teaching practices and assessing the impacts on their students. Moreover, they were knowledgeable about the basic conditions for learning and the characteristics of students, including learning styles and stages of development. The topics for the seminar meetings reflected the questions faculty were interested in investigating. We also took time during each of the seminar meetings to hear reports on how individual research projects were shaping up and to offer suggestions on problems and issues as they emerged.

By January, those faculty who had conducted research projects during the fall had enough data to keep them busy for at least a semester. The remainder had outlined classroom research projects in sufficient detail to proceed. We continued to meet about once a month during the spring semester, using the meetings to keep one another informed about progress, to brainstorm solutions for unanticipated problems, to report findings as they came in, to begin speculating about what those data might mean, and to encourage the researchers to write up their projects to share with others.

About a dozen of our original twenty researchers continued to meet through the spring. Of those who dropped out, a couple had courses which did not fill, another two or three just could not seem to fit their data collection in until it was too late, and the rest lost interest or simply never managed to define testable questions to pursue. We asked the remainder to write about their research, using the following as general organizing questions: 1) What was the problem/question your research addressed and what was its significance to you? 2) What did you do to address your problem/question and how did you attempt to ascertain the effects of what you did or the answers to your question? 3) What did you find out? 4) How did or will what you did and found out affect your teaching practice? 5) What are some of your reflections on your "classroom research" experience? The papers in this collection are all of those completed by early June of this year.

We think that they are an interesting set of papers, quite representative of the range of classroom research questions which our group took on. When we invited faculty to participate in the program, we told them that we were "thinking about a program that would support your efforts to be creative and experimental, watchful and reflective, as you deal with the day-to-day realities of teaching," and we stressed that we were "not seeking to add pages to educational research journals or to conduct the sorts of studies found therein." We wanted something different from traditional educational research and from the individual consultation that we already offered to faculty. We think we got that. In most cases, the emphasis upon questions that faculty were interested in investigating led us in different directions, involved us in collecting data we do not ordinarily collect, and stimulated conversations we do not normally have. Although these activities have not always been those most likely to lead to significant or urgently needed improvements in teaching or learning, the projects have been interesting, they've generated enthusiasm, and they've created a sense of suspense that brings people to meetings eager to hear what colleagues are finding. We were happy about that and look forward to another round this year.

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Author Notes

An earlier version of this paper was presented at the 1988 Annual Meeting of the American Association for Higher Education in Washington, D. C., as part of the POD Network sampler, Reforming undergraduate teaching and learning: Views from the Trenches.

Art Essays and Computer Letters

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One of the primary goals of the Introduction to Art course that I teach every semester is to develop students' skills in interpreting works of visual art by requiring them to write brief interpretive essays on paintings that are new to them. Although many of the students (mostly freshmen) have experience in isolating themes, developing their own opinions, and supporting their ideas by specific references or quotations from literary texts, almost none have previous experience with interpreting paintings. It is difficult for most of them to transfer general principles and skills from writing about stories or poems to writing about paintings, and it is particularly difficult for many to absorb the idea that, although their essays should *include* descriptive passages, interpreting a painting is not simply describing the figures, things, and places that are represented in it.

Since the class must be taught in a large auditorium, to between one hundred and fifty to two hundred students (with no discussion section), there are few opportunities for general interchange or the oral interpretation of paintings, so the essays provide rare occasions for students to apply and synthesize information discussed in the course text and the lectures. Students are required to write essays as part of the two five-week exams and they have the option (which most of them do not take) of writing an essay as part of their final. The format for the two essays is provided on the course syllabus as follows:

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ESSAY I

The works shown (slides of *Christina's World* by Andrew Wyeth and *The Scream* by Edward Munch, for example) represent similar subjects but express different themes, feelings, or ideas. Compare and contrast what is expressed in each painting, taking account of a. b. and c. below as support and explanation for your opinions.

a. What is represented and how?
b. What visual elements are employed and how are they organized?
c. What media and techniques are used?

ESSAY II

Same as above (slides of Kathe Kollwitz's *The People* and Giorgio de Chirico's *The Mystery and Melancholy of a Street* – artists discussed in the text and lectures), plus:

d. Which 19th or 20th-century styles do the paintings belong to?
e. Which other paintings or artists or styles have interesting relationships to these two examples?

Essay I follows a series of exercises, lectures, and readings on the organization of images, such "visual elements" as line, color, shape, and texture, and a survey of visual media and techniques. The different aspects of painting that may be considered under "a" through "c" and how each may relate to the overall theme or idea of a painting have been fully discussed, so the questions here serve as reminders. Essay II, which comes at the conclusion of a study of prominent styles and artists from the 1860s to the 1960s, builds on the established format. It is emphasized that the basis for the first interpretation is careful observation and analysis of the internal features and organization of the paintings, while the second interpretation is based on background information, as well as what meets the eye directly.

The Problem

My goal of developing interpretive skills which will be applicable to a wide variety of paintings not specifically dealt with in this course is largely thwarted by the size of the class. I am committed to two two-week periods of intense grading each semester and I am able to make fairly extensive comments on each essay – which the students seem to appreciate. However, even the student who is able to make adjustments to the second essay, based on my comments on the first, may make an entirely different set of mistakes and have no sense of development or improvement. In order to develop skills and correct mistakes, students should write at least four or five essays during the semester; some of these should be identical in format. Without making myself a grading machine, I cannot take the time to read and assess this many essays in my usual manner.

Method

With the ultimate aim of assigning more essays and taking less time to grade them, therefore, I proposed the following experiment in the context of the classroom research group sponsored by URI's Instructional Development Program. I wanted to compare (1) the quality of student essays, (2) students' attitudes toward how their essays were graded, and (3) the amount of time spent grading essays, when half of the essays were assessed in my usual way, with notes in the margins, questions, underlinings, etc., and the others were evaluated by means of computer-printed letters which sketched out their principal strengths and weaknesses.

After grading the first group of essays in my usual way, I proposed the compilation of a glossary of numbered comments consisting of paragraphs and sentences frequently applied to the first batch of essays. In grading the second group, I would simply write the numbers of appropriate comments on the class roster, leaving it to my (highly responsible, mature) undergraduate assistant to write "Dear X," print out the pertinent paragraphs, and staple the letter to the exam for my signature. I proposed keeping track of the time that it took me to grade each group of essays, the time it took to compile the bank of comments, and the time it took my assistant to print the letters. After each exam, I would also solicit student feedback on the value of my commentary by means of a short questionnaire, asking (1) Did the comments indicate what was good about your essay? (2) Did the comments indicate what was wrong with your essay? (3) Would my comments on this essay enable you to now write a better essay on the same paintings? (4) Would my comments on this essay enable you to write a better essay of the same type on different paintings? After students had received one set of "normal" comments and one computer-generated letter, I would ask: (5) Which kind of feedback do you prefer? Finally, I would keep track of students' grades on the two essays.

Description of Comments

For the first essay, I developed a bank of comments very similar to the comments I write on student papers. These consisted of (1) ten fairly long paragraphs having the titles of EXCELLENT, EXCELLENT BUT TOO GENERAL, VERY GOOD BUT, GOOD BUT NON-SPECIFIC DESCRIPTION, DESCRIPTION NOT RELATED TO INTERPRETATION, TOO DESCRIPTIVE, NOT COMPARATIVE, RIGHT IDEA/ UNINSPIRED, ABBREVIATED/SUPERFICIAL, and STORY, corresponding to the paragraphs that I normally write at the bottom of essays, summarizing the main problems of the essay and providing an overall rationale for the grade; (2) about ten short specific comments on the particular paintings they were writing on, such as: "I like your discussion of the stylized landscape in The Scream." "Look at Christina's position carefully when I show the slide again. Doesn't it seem awkward to you? Is this a comfortable position in which to sit back and enjoy the beauties of nature? Is "nature" represented here as lush and beautiful?" These correspond to brief phrases, questions, underlinings, and question marks that I normally insert in the text of the essays. Additionally, there were (3) such short statements as "I like the fact that you compare the two paintings very directly throughout your essay, bringing out the overall ideas or themes of each in relation to the other." and "Remember that you're being asked to compare the two paintings. This almost reads like two separate interpretive essays." (4) There were five comments on the use and misuse of terminology such as: "Check chiaroscuro in Hobbs. This term doesn't apply to any value contrast, only to light to dark shading used to suggest the fall of light on three-dimensional objects." Finally, (5) there were comments on writing style, grammar, and sentence and paragraph structure, ranging from a seventeen-line comment on general organization (see Appendix) to the one-liner: "You write very well! I get a vivid image of the paintings from your descriptions.

The comments on the second essay were similar, with the addition of (6) a category of comments on the historical context, e.g., Post-Impressionism, Expressionism, Surrealism (see appendix), but additionally complicated by the fact that students had the option of writing on either of the two paintings shown or of comparing them.

Problems of Implementation

Many of the problems I ran into had nothing whatsoever to do with idea of my project and everything to do with the fact that my student assistant and I were new computer users dealing with an imperfect and quirky system. I stopped keeping track of our time when it became evident that we were spending ages on this project, partly due to mechanical difficulties and user inexperience.

It should have been relatively simple to establish a glossary of named or numbered comments as the components of individualized letters, which to save time, could be printed out by someone other than the instructor. In future, I think it will be easy to do this. This time, however, it took two-and-a-half weeks before the first group of essays were returned and an unprecedented three-and-a-half weeks to return the second essay.

The second set of problems had to do with the nature of the comments themselves. I found these very difficult to write, in spite of the fact that I normally scribble away on student papers with great speed and fluidity. I fiddled with my bank of comments for an inordinately long time because I didn't like them, in spite of the fact that they were a fairly close facsimilie of the range and type of comments I've been scrawling on student essays for the last fifteen years. Faced with systematizing the "normal" range of comments I make on essays, I realized how unsystematic they were and found that the process of preparing a glossary of comments precipitated a wholesale analysis of intentions and effects, changing my focus from efficient delivery of feedback to students to its analysis . Although other experienced essay graders might not discover the same sorts of flaws in the substance of their comments as I did, I believe that the process of gathering and grouping leads naturally to analysis, which is more fundamental and difficult than any question of whether or not to do computer letters and which certainly complicates and defers this question.

Results

As already noted, I stopped counting the hours spent on compiling the banks of comments used to generate the computerized grading letters. It took a long time, much longer, this first time around, than it would have taken to grade and write on the essays in my usual fashion. I did, however, ask students to complete the five-item reaction questionnaire after returning each of the essays. It was clear that students much preferred the handwritten comments. After the second essay exam, by which time each student had experienced both modes of commentary, two-thirds indicated a preference for handwritten comments while less than a quarter preferred the computerized letter. In contrast, there were no differences in students' ratings of how useful the two types of comments were after the first exam, except that the handwritten comments were better indicators of what was good about their essays. Whatever student preferences after the second exam, their ratings of the usefulness of both types of comments were high (ranging from a 72% indication that the comments would help improve subsequent essays on different paintings to the 88% who thought that the comments indicated what was good about their essay), with the computerized comments rated as useful by a slightly higher percentage of students than the handwritten comments.

Finally, the grades on Essay II averaged about half a point higher (on a 10-point scale) than grades on the first essay, which is usual in my experience. The mode of commenting on the first essay did not differentially affect scores on the second, so, although students were not enthusiastic about the computer letters, they were evidently helpful.

Discussion

The principle benefits of the classroom research had less to do with computer letters versus "normal" handwritten comments on essays than with the analysis of grading practices which resulted. Having a bank of comments that were reasonable approximations of what I normally write on student essays was very revealing. I already knew, for example, that I tended to focus on what was wrong with the essays and gloss over the positive features with the blanket statement, "You make some good points about the two paintings, but..." However, I did not realize how extreme my cataloging of problems was or how dismaying this was for students. In relation to my computer letters on the first essay, this was graphically illustrated when I saw that some students received two pages of single-spaced negative commentary on their essays. Similarly, I always wrote least on the excellent essays. With the help of the faculty classroom research group, I came to realize that I was *reading for problems* and that the things that most students were doing right (e.g., operating on an appropriate interpretive level) became invisible to me as I was grading. Traditional and computer letter feedback on the first essay was uniformly negative and the grades were (as usual) low, in spite of the fact that I had the impression that this class's essays were rather better than the norm; on the day that I handed them back, students were vociferously disgruntled. Because the essays were, on the whole, good, I later realized that I had unconsciously raised my standards.

I worked on developing a range of positive comments for the second essay and I was careful to include positive reinforcement in the handwritten notes, which, I believe, improved morale and enabled students to better accept my discussions of their problems. In writing comments on the second essay, I fell into the habit of using the format "The good points of this essay are:" and listing them by number, then "The not-so-good points are:" and listing these. In future experiments with computer feedback, I shall be sure to use the same format for my notes on exams and the computer printout.

Students in large classes, who have little individual contact with instructors, will probably continue to prefer the human touch of handwritten notes and individualized responses to computer letters composed of stock paragraphs and phrases. From my point of view, however, it is worth continuing classroom research with essays and computers for several reasons. I have already discussed the analytic value of compiling and categorizing frequently repeated messages to students. Many of my comments are, in fact, standardized, whether or not they are handwritten. By preparing mini-essays on common problems, I can often provide students with more complete and better-illustrated explanations of what these problems are and how to avoid them, and, at the same time, free myself of some of the drudgery of repetition. The computer letter will eventually enable me to make more comments and assign more essays. I also forsee that I will be able to use the glossaries from previous exams in preparatory exercises or special essay-writing help sessions. Too, it would be interesting to test the objectivity of grading essays by grading them twice, with the same glossary of comments, or comparing the glossary selections of different graders. Assuming that it is easier to select appropriate comments than to compose them, some modification of the computer-glossary idea might be especially useful in preparing graduate student teaching assistants to deal with the piles of essays and papers to be evaluated which await them.

Apart from large class teaching or self-analysis, devising banks or glossaries of comments for response to students' written assignments is probably unnecessary or inappropriate. I would suggest that others wishing to experiment with computer letter feedback start writing out, developing, and categorizing their comments at least one semester before implementing the project. The computer letters may save time eventually, but it will make grading essays more time-consuming the first time around, and, I suspect, the second time as well.

Appendix

Samples of Computer Letters

EXCELLENT ANSWER, ESSAY I

Dear Mary,

This is an excellent essay answer in which description is used well to develop and illustrate your interpretive points. The comparisons you make are interesting and convincing. Some of the following points are "quibbles" rather than real problems in your essay (keep them in mind so that they don't become problems in the other essays you write).

I realize that it is difficult to produce an organized essay in the short time period of one class, however, the lack of organization in your essay is diluting the strength of the good descriptive and comparative points you make! Use paragraph structure to help in dealing with the question in an orderly way. For example, start off with a general interpretive statement of comparison between the two paintings. Even if it is very short, let this be your first paragraph. Go on to support and explain what you say in the first pargaraph by describing and comparing the styles of representation in the two paintings. Here, deal with facial expressions, poses, relationships of figures, locations of figures in the picture space, relationships between figures and environment – anything that relates to the paintings as representations of the visible world. Let this be your second paragraph. Next, describe and compare the visual elements (colors, lines, shapes, textures, and their relationships) which best support your interpretive points in another paragraph. If you have an interpretive conclusion or summary, make this your final paragraph. This sort of paragraph structure will serve to guide your reader, signaling when you are finished with one category of concerns and are ready to turn to the next.

Use the worksheet provided as a sort of outline of your main points along the lines suggested above. Don't start writing your essay until you have settled on your main points on the worksheet.

Sincerely yours,

GOOD ANSWER – PROBLEM WITH DESCRIPTION, ESSAY I

This is a good essay answer, with a clear interpretive thesis and some good descriptive support. Be careful, however, to make your descriptions specific, for example, don't just say that Christina's position is awkward, describe how it is – say that her body is twisted from the waist, supported by thin out-stretched arms as she leans toward the house on the horizon. Or, in discussing the visual elements, don't just say that Munch uses highly saturated colors (some are highly saturated, some aren't), but say where, and say how these interact with other colors – for example, the intense red of the sky is in strong contrast to the dull colors used elsewhere in the painting; it casts a fiery glow over the swirling landscape and screaming figure below. Of course, I may know what you mean when you refer generally to some aspect of the image or the visual elements, but, in order to understand your interpretation fully, I must have more information about what it is based upon. I must have more information about how you see the paintings. Although it may be better to omit technical terms than to overuse them, the technical vocabulary introduced in Chapter 2 of Hobbs is intended to serve as a tool for exact description. Use the correct terms, when appropriate, and be sure to study terminology before the multiple choice part of the first exam.

EXCELLENT, ESSAY II

This is an excellent essay answer in which description is well used to develop and illustrate your interpretive points. What you say is interesting and convincing. The new aspects of the questions are well integrated with the rest of your statements.

I appreciate your specific descriptions of the facial expressions and postures of the figures, but don't forget about the space they occupy – the broad white margins and the block of shading above the heads – which also contributes to the overall mood or idea.

The following points are mostly "quibbles" rather than serious problems (I have to include more than general praise, especially since I've taken so long in grading) but take care not to let them become problems on your final.

The other works and/or artists you mention are potentially good comparisons but your development is sketchy. You must describe and discuss other works fully enough to establish what the basis of comparison with The People is, how they are similiar to The People and how they are different. The whole point of comparing is to enable you to say more about this particular drawing by placing it in a comparative context. The list, SPECIFIC WORKS TO REMEMBER FOR EXAM II AND FINAL, is a good source of specific comparisons. Look carefully at these paintings, most of which are reproduced in your text book, as well as memorizing the dates and titles.

For future reference, remember that both Hobbs and I simplified some styles and relationships for purposes of presenting a clear introduction to a very complex period, so don't be surprised if you discover that the classification of artists and the differentiation among styles is more problematic than was indicated. We must start to make sense of any period or any subject by making some grand generalizations which are later called into question; your sense-making is just fine at this stage.

ADEQUATE ANSWER, ESSAY II

This is a nice general interpretation of *The People* supported by a.b.c. sorts of considerations. The kinds of observations you make about the drawing are *always* relevant in interpretation, so this is a strength of your essay.

You make some good points about the space and location of images, but don't forget to describe (some of) the facial expressions you mention in some detail.

You correctly identify Kathe Kollwitz as a German Expressionist (just "Expressionist" is O.K. but less precise) – good. However, you must say more about this style. Describe the main concerns and characteristics of the movement and the range of its productions. Be sure to say what the German Expressionist characteristics of *The People* are and mention a couple of other examples.

The other works and/or artists you mention are potentially good comparisons but your development is sketchy. You must describe and discuss other works fully enough to establish what the basis of comparison with *The People* is, how they are similiar to *The People* and how they are different. The whole point of comparing is to enable you to say more about this particular drawing by placing it in a comparative context. The list, SPECIFIC WORKS TO REMEMBER FOR EXAM II AND FINAL, is a good source of specific comparisons. Look carefully at these paintings, most of which are reproduced in your text book, as well as memorizing the dates and titles.

Alternatives for Evaluating the Death Education Student

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Although grading in postsecondary education, according to Eison and Pollio (1987), dates back about 200 years, the formal pursuit of learning focused on human mortality *per se* has been a part of higher education for only about thirty years. In that brief period, however, has come a rapidly growing concern with issues of evaluating and grading, paired with concern about motivation for enrollment in such courses in the first place. I've been very interested for some years in self-assessment as it bears on evaluation for grading, especially in courses where the content and approach encourage a great deal of self-disclosure and evaluation is likely to be highly subjective.

The main question which intrigues me centers on whether adult students given the option of choosing weights to be given to the various grading components in a course will use their self-knowledge to optimize their grades. While allowing them to assign those weights may seem like an attempt to dodge responsibility for grading, I think it is responsive to the reality of adult learners, their characteristics, and the body of research which suggests a different, more self-directed approach to much of their formal and informal education. Moreover, I agree with Guskey's assertion that "...procedures for evaluating learning should be congruent with learning objectives" (1988, pp. 62-63).

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This paper is a description of one attempt to deal with the grading issue. Specifically, it describes a pilot study in a seminar on "Death, dying, and bereavement" which is offered as an upper division and graduate level three-credit course in alternating semesters. The course is designed to help students: learn the variety of impacts death has on human behavior; see death as a meaningful human experience that can be dealt with; see that death has several significant implications for the living, including determining what choices are valid for oneself and others; be able to apply principles and behaviors of known effectiveness in situations of life and death decision-making and grief for self and others. Students are graded on the basis of their performance on take home quizzes, a written briefing report, and participation in class activities.

The course attracts a fair number of social science and human service students, but, in truth, the major is not a relevant factor in electing this course for most. Many of the students are older than the typical college student and the great majority are women. Most are drawn to the course out of a desire to find a structured way to come to terms with personal issues having to do with loss through death, or to resolve a particular bereavement. They are often candid about those needs, although their notions of the methods by which such resolution might come about are nebulous at best when the course begins. Some openly state that they were drawn to the course by the hope of coming to grips with their own mortality. Others are less candid and claim broader, less personal sounding goals in the first class meetings. Interestingly, each semester, while enrolled in the course, between four and eighteen percent of the students have lost a significant other to death.

Method

In this modest pilot study I was interested in checking out my guess that students who take this course are more concerned about learning than about grades and, more importantly, I wanted to test a notion about the consequences of allowing students to select their own grade weights. My hypothesis about the latter was that students would get better component and final grades if each decided in advance how much relative weight should be attached to their quizzes, briefing reports, and class activities participation than if I assigned uniform weights to each component for all students.

The LOGO II (Eison, Pollio, and Milton, 1982) was used to examine student orientations toward learning and grading. It was administered during the first class and again at the end of the semester. The test includes sixteen items about students' attitudes toward various classroom policies or student learning behaviors. Students respond to them on a strongly agree to strongly disagree scale. Another sixteen items about study attitudes and behaviors call for frequency estimates. The results generate separate learning and grade orientation scores. The primary reason for conducting this study, however, was to find out if students fare better when they can influence the weightings of the elements of the grading system – that is, decide what counts for the most and least number of points in grading. Procedurally, the grade weighting options were described on a "contract" which allowed students to assign percent weights to each of the three graded aspects of the course: three take home quizzes, a briefing report, and class activities participation. The constraints were that the quizzes (collectively) had to count at least 20%, the report at least 25%, and the participation could not count more than 25%. I collected their contracts in the second class and set them aside without looking at them until the end of the semester. I told them about the previous semester's standard weights (40, 35, and 25%), which I used for comparison, after they turned in their contracts. I used a MacIntosh computer and an Excel spreadsheet to keep track of the data and compare the weighted grades.

Results and Discussion

The LOGO II results were about as expected: the mean Learning Orientation Total score at the beginning of the semester was 54.91 for the 11 students in the course. Their average Grade Orientation score was 35.82. That would put them above the 80th percentile on Learning Orientation, and below the 20th on Grade Orientation, on a set of norms based on a sample of 812 students at the University of Tennessee, Knoxville (Eison, undated). Their mean scores were essentially the same at the end of the semester. There was a tendency, albeit statistically insignificant, toward learning orientation being highest in the oldest students and grade orientation highest in the youngest.

The weights assigned to each grading component by students, and the component and total scores each received, are reported in Table 1, along with comparison weights and scores based on the previous semester's grading system. No student assigned weights which matched my comparison system. One result was that the component scores of individuals varied quite dramatically from what they would have been if I had applied a standard weighting system. Even so, no total score was more than six tenths of a point different than it would have been, and the mean total

TABLE 1
Grading Component Weights and Scores

	Raw scores (r-score) and student (S) and instructor (I) weights and weighted scores (w-score)							
	Quizzes		Participation		Report		Final Score	
Student	S	I	S	I	S	I	S	I
r-score	90.0		87.0		90.0			
01 weights	40%	40%	25%	35%	35%	25%		
w-score	36.0	36.0	21.8	30.5	31.5	22.5	89.3	89.0
r-score	92.0		87.0		93.0			
02 weights	30%	40%	45%	35%	25%	25%		
w-score	27.6	36.8	39.2	30.5	23.3	23.3	90.0	90.5
r-score	92.0		87.0		93.0			
03 weights	45%	40%	40%	35%	15%	25%		
w-score	41.4	36.8	34.8	30.5	14.0	23.3	90.2	90.5
r-score	88.0		90.0		90.0			
04 weights	50%	40%	25%	35%	25%	25%		
w-score	44.0	35.2	22.5	31.5	22.5	22.5	89.0	89.2
r-score	91.0		90.0		90.0			
05 weights	30%	40%	45%	35%	25%	25%		
w-score	27.3	36.4	40.5	31.5	22.5	22.5	90.3	90.4
r-score	87.0		84.0		87.0			
06 weights	20%	40%	55%	35%	25%	25%		
w-score	17.4	34.8	46.2	29.4	21.8	21.8	85.4	86.0
r-score	88.7		90.0		93.0			
07 weights	45%	40%	30%	35%	25%	25%		
w-score	39.9	35.5	27.0	31.5	23.3	23.3	90.2	90.2
r-score	83.7		84.0		90.0			
08 weights	50%	40%	25%	35%	25%	25%		
w-score	41.8	33.5	21.0	29.4	22.5	22.5	85.3	85.4
r-score	91.0		87.0		90.0			
09 weights	45%	40%	30%	35%	25%	25%		
w-score	41.0	36.4	26.1	30.5	22.5	22.5	89.6	89.4

(Continued on next page.)

TABLE 1 – Continued.

	Quizzes		Participation		Report		Final Score	
Student	S	I	S	I	S	I	S	I
r-score	88.0		90.0		90.0			
10 weights	35%	40%	40%	35%	25%	25%		
w-score	30.8	35.2	36.0	31.5	22.5	22.5	89.3	89.2
r-score	87.0		84.0		90.0			
11 weights	40%	40%	40%	35%	20%	25%		
w-score	34.8	34.8	33.6	29.4	18.0	22.5	86.4	86.7

Note. All raw scores have a maximum value of 100; weighted scores are weights x raw scores. The quiz raw score is a mean of the three take home quiz scores.

scores were virtually identical under the two systems (88.6 and 88.7). In effect, having the option of deciding for themselves how to weight the graded components of the course had no discernable impact on any student's grade.

In summary, this research in a seminar on death and dying found that these eleven students were indeed much more learning than grade oriented but, counter to my expectations, electing their own grading weights did not result in higher (or lower) grades for any of them. I am not surprised by the high learning orientation of these students and expect that that finding could be replicated repeatedly in this course. But I am puzzled by the lack of more pronounced effects from the self-determined grading weights option. I expected to find their ability to take rightful advantage of self-knowledge to optimize grades borne out in the final scores.

I suspect that a grading format which included in-class exams in the mix might turn up more support for my original hypothesis. As is evident from Table 1, there was substantial variability within and across students in the weights chosen for each component. There was not, however, much variability in raw scores for individual students or the class as a whole. Adding in-class exams would almost certainly increase that variability dramatically and make possible a more conclusive test of my basic hypothesis.

Given that the grading elements which I have been using seem more appropriate to my course goals, however, I'm not likely to add in regular examinations. But, because the feedback from students about the self-determination option was so enthusiastically and uniformly positive, I will keep it for this course in the future. Perhaps the element of perceived influence and control of outcomes (and reduced grade anxiety?), albeit in students with more concern about learning than grading, is sufficient justification for its retention in the course. And, as mentioned earlier, this particular subject matter and students' reasons for taking the course seem to call for special considerations.

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Evaluating Structured Group Activities for the Large Class

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I teach a 500-student introductory course in a large lecture hall with a microphone and an overhead projector. For many students this is a first semester course; often it is taken to fulfill a requirement although there is usually some interest in the subject matter (psychology). I am not a particularly charismatic speaker. From the back of the classroom I look ant-size, and my voice rattles, disembodied, from the loudspeakers. Despite this, I want to use class time effectively to give students not only exposure to concepts but practice in using them. I believe memorized factual material will be of little lasting value unless tied to students' ways of thinking and problem-solving in their worlds. For that reason, I want to provide students with structured opportunities to think critically about course content issues and to master and internalize concepts by collaborating in their application. I also want my students to become intrigued enough to want to learn more about psychology.

I wanted to see if, in a class of 500, I could provide students with opportunities to discuss concepts with one another, apply concepts to practical problems, explore together the value implications of what they were learning, and critque conclusions drawn from previous research. Further, I wanted to know if students would respond positively to such opportunities when they were not directly tied to examinations, or would only appreciate activities that obviously provided practice relevant to tests.

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Method

As one means to respond to those challenges, I developed a semester-long series of structured small-group activities to be undertaken in the large classroom. There were two kinds of activities: "involvement" and "practice." For both kinds, the class was asked to divide into groups of two or three students and given a concrete, two-to-five-minute task and a product to generate, usually on a piece of paper to be signed by all group members and turned in. The task was presented via the overhead projector. Involvement tasks ordinarily occurred near the beginning of class and entailed questions or challenges without right or wrong answers (e.g., making up items for a campus stress scale). Practice tasks initially occurred near the end of class and called for answers to non-memorization questions that might appear on an examination (e.g., deciding which types of psychologist would engage in several provided examples of activities). In response to student feedback, practice tasks were redesigned to be conducted at the beginning of class, with the answers reviewed at the end of class. Often, I gave feedback to the class regarding their responses to the tasks. This was sometimes done immediately by taking a show of hands or brief oral answers. At other times, feedback was given in the form of a report by me in the next class, based on the written products turned in by students. Their products were never graded.

I wanted to know whether these alternative uses of class time were having some impact on my students and I wanted feedback to improve my exercises. Since I could not randomly assign some of my students to small group activities while the rest got only a conventional lecture, I chose to randomly assign topics within the course to different treatments. My survey course covers an eighteen chapter textbook, each chapter treating a standard psychology topic, progressing from the biological to the social end of psychology. So I simply divided the course into thirds and randomly assigned the six topics covered in each third to one of three treatments: involvement, practice, or conventional lecture.

To assess the effects of the activities on students, I planned three general sources of information: (1) ratings by students of individual activities, collected at the end of the class period in which the activity was conducted; (2) retrospective recall and ratings by students at the end of the semester; and (3) performance on final examination questions. The ratings collected after each activity were on a one-to-ten rating scale with one least favorable and ten most favorable. The ratings were accompanied by two qualitative questions: "What caused you to rate it as highly as you did?" and "What kept you from rating it higher?" Results from each administration of this form were reported back to me within a week so that

I could respond to them in planning subsequent activities. At the end of the semester, students were given a questionnaire that asked them to (1) indicate their interest in learning more about each topic covered in the course; (2) recall activities that stood out as good or bad; (3) rate their frequency and intensity of participation in group activities (4) suggest the optimal frequency of practice and involvement activities; and (5) rate the small group activities as a whole on a one-to-ten scale. I also intended to derive subscores by topic and treatment from the final, but I have not done that rescoring.

Results

First, how did students react to the activities immediately after each was conducted? Due to the logistical difficulties associated with frequent surveys of a class of 500, only four of six "involvement" and three of six "practice" activities were actually evaluated in this way. The class ratings of involvement activities ranged from 6.19 to 8.05, with a mean of 7.23. The range for practice activities was from 6.54 to 6.98, with a mean of 6.83. Qualitative comments ranged from very positive ("gives good practice for exams," "makes lecture material more interesting") to very negative ("a boring waste of time," "too easy," "too hard to understand"), but one set of comments was very consistent: students found activities placed at the end of class unhelpful – they felt rushed and had trouble concentrating on the task or my post-task commentary.

At the end of the semester, what were students' retrospective reactions? Students were asked first to read a list of the eighteen topics which had been treated in the course and to indicate their interest in each by circling any of the following: A) "If I had time, I'd like to take another course about this." B) "I wish we had spent more class time on this." C) "I'd like to read more about this." D) "I found this generally interesting but don't have any particular interest in following it up in any way." They were instructed to circle as many responses (from none to four) as they wished for each topic. Table 1 presents the proportions of students who circled each response to each topic, with the topics grouped by treatment. Topics associated with involvement activities seem to have generated the most interest, closely followed by topics treated by conventional lectures. Topics associated with practice activities were least likely to be found interesting. Asked to think back on the 10-12 exercises tried in class and to list any which stood out as good or bad, students were more than twice as likely to name involvement activities than practice activities as good, and much more likely to name practice than involvement activities as bad. Al-

TABLE 1
Mean Percentages of 229 Students Indicating Interest in Course Topics Grouped By Experimental Treatment

	Experimental Treatment During Topic		
Type of Interest	**Involvement**	**Practice**	**Lecture**
Would take another course	25%	18%	21%
Would prefer more class time	27%	23%	27%
Would like to read more	31%	28%	31%
Interesting, no more follow-up	33%	29%	33%

TABLE 2
End-of-Semester Ratings of Preferred Frequencies of Involvement and Practice Small Group Exercises

Type of Exercise	Preferred frequency				
	Every class	**Weekly**	**Bi-weekly**	**Monthly**	**Never**
Involvement	48	93	46	18	8
Practice	51	111	34	10	7

though they were not among the 10-12 exercises I had in mind, students also listed a few of the classroom demonstrations that were part of the "conventional lecture" treatments. Overall, 126 of the 229 students responding to the questionnaire recalled at least one activity as good and 78 listed at least one as bad.

Students were also asked how frequently the two types of activity should be done in my lecture class. Their responses are summarized in Table 2. A large majority of them indicated that involvement and practice exercises should be done at least weekly, with the practice activities somewhat more likely than involvement activities to be preferred at least weekly. The most common recommendation for frequency of in-class discussions was weekly.

Finally, students were asked for an overall rating of the various small group activities tried in class over the semester. On the same 10-point scale used during the semester, their mean rating was 6.63, with a standard deviation of 1.91. That retrospective rating was somewhat lower than the average of the ratings given during the semester.

Discussion

Feedback from students has already had some impact, and knowledge gained from the project has additional implications for the future. The timing of discussion activities was crucial. The most effective approach was to structure the activity so that it could be conducted near the beginning of a class, with a follow-up at the end of the class. This was difficult for me at times, since I wanted the activities to serve as a chance for critiquing, reviewing, and practicing applications of lecture content. However, feedback indicated that students found the end-of-class timing so aversive that the pedagogical advantages of the early-in-class timing clearly outweighed the disadvantages.

From the data collected at the end of the semester it appears that involvement activities may have somewhat more impact on students' subsequent interest in a topic, and students are more likely to recall those activities as positive experiences. However, when asked how often they would like involvement and practice activities, they were somewhat more interested in frequent practice. Coming shortly before the final examination, a question about preferred frequency of practice may have struck a particularly responsive chord.

Two sources of complexity make it unwise to come down firmly for or against group activities in general and for involvement versus practice. The first complexity is that each use of class time appears to have strengths and weaknesses. Practice may help with examinations and be reassuring in that sense, but may be less likely to leave a vivid, lasting impression of the significance of the content. Involvement is more memorable and interest-enhancing, but not so relevant for test preparation. Conventional lectures, especially with the kinds of demonstrations and dramatic examples I use, allow more controlled, systematic presentation of the subject matter. Secondly, students vary widely in their goals for survey courses and in the ways they prefer to learn. The most striking quality of the written feedback I received was its variability. For some students a chance to discuss issues related to the course with other students was a wonderful opportunity. For others it was a needless distraction, not at all helpful. Some students didn't need such activities to grasp the issues and concepts, and for them more lecture seemed preferable. Others were angered and bewildered by being asked to discuss content they did not understand, and they also preferred lectures. Apparently there are no right answers to my seemingly straightforward questions and this frustrates me almost as much as it frustrates my students. Instead of answers, I am left with more sophisticated questions and a clearer sense of the inherent difficulty of what I am attempting to accomplish in my classroom.

Reflections on classroom research

Asking students to provide extensive quantitative and qualitative feedback on a pedagogical innovation in my classroom was an instructive experience. I was forced to try to specify my objectives more clearly than I liked, and to plan my classroom activities more systematically and conscientiously than is usual. I was subjected to bi-weekly pages of students' qualitative comments, some laudatory and some just plain nasty. I had the delightful opportunity to work collaboratively with colleagues committed to teaching, both those helping directly in designing and conducting this project and those struggling with their own projects. I discovered how annoyed many students were that I wanted to keep asking them for feedback – it was not part of what they defined as their classroom responsibility, and it was widely viewed as an imposition. I found the experience stimulating, a good way to keep my creative juices flowing, but also frustrating, a time when my imperfections and my students' heterogeneity were brought home with quantitative precision and qualitative vividness.

As a teacher I am not primarily focused on making my courses suitable for rigorous research, and the requirements of even the relatively benign, non-experimental project reported here were sometimes onerous. Special timing constraints and classroom logistics were added onto my already complex task in the classroom. Despite this, and despite the pain associated with renewed awareness of my fallibility, I learned a good deal from the experience, and I believe it benefited both the class in which I conducted the project and my future sallies into the large-classroom-introductory-course. I intend to continue experimenting with small group activities and will at some point want to take another systematic look at their impact. I tell my students that learning requires risk-taking. My own learning ought be no exception.

Undergraduate Students' Use of Time: A Classroom Investigation

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Conducting a classroom research project gave me a new kind of opportunity to learn through teaching. Until recently, most of what I learned through teaching was either about subject matter (e.g., gaining a new interpretive perspective on a problem from a student) or about pedagogical knowledge (e.g., how particular aspects of a course should be organized and presented most effectively). Classroom research gave me the opportunity to learn about learning from students. Thus, as I approached the classroom research project, two things seemed to distinguish it from more traditional ways I have learned from students: 1) in conducting classroom research I would focus on students' learning (as opposed to subject matter knowledge or to my skills at teaching); and 2) my own learning would be the result of fairly systematic efforts rather than serendipitous occurrence. While classroom research may be less formal and more applied than much other research that faculty members conduct, as with all research it begins with a question to be addressed.

Questions of the Study

My current assignment is administrative; I am dean of a college that serves both undergraduate and graduate students. Two of the questions

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that interest me are: How can we increase undergraduates' involvement in their own learning? and What are the most effective ways to promote research through graduate education? In the end, my classroom research project helped me focus on both of these challenges, although I did not see the connection clearly at the beginning of my project.

Initially, my project focused on this question: How do undergraduate students at our institution use their time? The question represents an operational attempt to learn more about student involvement in learning, a topic which has interested me for a number of years. To be involved in learning means, at least, to spend time on learning, to be engaged in activities that promote learning, to work on learning outside the class-room. After several years of reading the literature on student retention and student involvement in learning, I have been struck by how little we know about the time students spend in class, and about the time they spend studying, working on research projects, and otherwise engaged in the types of learning experiences we hope they have.

I investigated this question with a group of graduate students enrolled in a one-credit seminar. Thus, the subjects of my initial interest (undergraduates) were not the students in my class. While this may stretch the boundaries of classroom research, I also learned about my graduate students as learners and as beginning researchers through documentation of their work and recording of their own discussion of that work.

My interest in undergraduate student use of time as a way to gauge student involvement in learning goes back five years when I became one of several "special academic counselors," each matched with five freshman or sophomores whose academic dismissal was waived if they would participate in this then-experimental program. We who served were to work individually with these students, armed with some knowledge about student retention and with information about University services that might be helpful to them. We met with our students as often as seemed productive. Some students paid little attention to us; others became fast friends and would visit weekly.

Soon I began asking my students how they were spending their time. I drew a grid for them on a piece of paper: seven columns and twenty-four rows, representing 168 hours in a week. One intention was to reinforce a rule we solemnly tell students at orientation: They should expect to spend three hours of academic time per week for every credit they are taking (e.g., a three-credit lecture course would have three hours of lecture per week plus six hours of study time). In general, students had difficulty with this exercise. Most needed prompts to think about how to fill out the grid. Some could not complete the exercise for the immediate prior week or for a "typical week this semester," and needed to be coaxed through keeping track of their time for a week at a time as they went.

This sort of primitive time-management investigation/tutoring raised questions for me: Were these students typical of our undergraduates in their use of time? I doubted it, since lack of time with their studies was clearly a problem for several of them; on the other hand, the published literature suggests that most students spend closer to one hour studying per hour in class than the two we hope for. Perhaps these students spend as much time studying but are less efficient at it or less well prepared on entry.

Were these students typical of our undergraduates in their (in)ability to easily describe their use of time or to plan how they would study? Are our over-achievers who do well academically and who also work and have outside activities more fluent in explaining their use of time? Are they more flexible in planning their time? Are our juniors and seniors more adept with their time?

The topic of student use of time continued to interest me. In these last years I have read a fair amount of the published literature on undergraduate students, and although I did not do a systematic search of the literature, I kept an eye out for research on student use of time. I found very little and none that I found satisfying.

Method

The class I worked with on this classroom research project was Issues in Higher Education, a one-credit class offered on an experimental basis to students in our master's degree program in higher education student personnel. Students in this program are preparing to work in student affairs divisions of colleges and universities, in settings such as admission, career services, learning assistance centers, student activities, financial aid, and residence halls. Most of the students are working on graduate assistantships in one of these offices on our campus. They are an energetic and engaging group of students and generally well-connected with many aspects of the lives of our undergraduates. The time study represented one-third of our work for the semester. Five students were enrolled in the class.

The graduate class seemed ideally suited to undertake the project: they were interested in undergraduate student life, had access to undergraduate students, were generally informed about aspects of undergraduate life mysterious to many faculty members, and were enrolled in a program that encouraged student research.

We prepared for designing the study by reading and having a guest lecturer. The readings included three chapters from Boyer's College: The Undergraduate Experience in America, a few research studies on student use of time that the seminar students found in the published literature, and a short paper I drafted for them explaining why an institution would be interested in knowing more about how undergraduates spend their time. Our guest lecturer was Dr. Fran Noring, a faculty member whose academic preparation included work on time management and studies of time use in the home. She brought us several other articles and some chapters from a national time use study (Robinson, 1977). She conducted a session for us on various ways people conceive of the time available to them and ways in which time use is studied; she also joined us for some of the other class sessions that focused on this project.

The week before the class designed the data collection instrument we spent some time going over material I thought would be helpful to them. One topic was a review of levels of power of social science research, from description, to prediction, to control. These graduate students tend to work at a very practical level; the temptation is to turn a question of use of time into a question of teaching students time management. Since the research on typical time management "workshops" reports rather dismal results (e.g. Cranney & Kirby, 1980), a study that would begin with a description of student use of time seemed to hold a promise of potential utility. The classroom challenge was to make the pay-off from "research" on time use seem interesting in itself while teasing students away from immediately practical ends.

In class we also reviewed various ways to study time use (e.g., time diary-yesterday/last week; time diary-tomorrow/next week; normal weekly schedule; estimates of time spent daily, weekly, monthly, or annually; and estimated frequencies). We ruled out as too expensive the most direct methods of studying undergraduate student use of time: following students around for a day or a week and recording their activities or giving students an electronic beeper set to go off at random times at which signal students would record their activity.

We talked about the research questions that such a study might address: How does the average student spend his or her time? Does that vary by gender, residence, year in school, grade point average, or major? What can we learn from students in trouble about their time use that might inform our programs to help them? Can time use describe different perceived subcultures of students, such as fraternity residents, adult students, athletes, engineers, commuters, and theatre majors? How do students spend their time in relation to our expressed hopes as an institution (e.g., Do they stay on campus for the weekend? Do they report attending campus cultural events?) Do various realistic ways of gathering data give us equally useful and apparently valid indications of student use of time?

Finally, we discussed our realistic expectations for the study, including how these graduate students would benefit from conducting this cooperative investigation.

One class period of 90 minutes was spent designing the study. The graduate students were to design a study that would gather hour-by-hour time use data from individual undergraduate students along with some other information (such as demographic data) that they could use to help interpret the time use data. The graduate students designed the study; my role was to serve as a recorder of their decisions and as their "secretary," who would turn their decisions into instruments they could use for data gathering. During their discussion, I tried to be quiet, observing their work, summarizing when helpful, and making sure I had recorded their decisions. (I find being silent this much generally very difficult in the classroom, and I did speak up at three or four points.)

By the end of the class period, the students had decided to gather the following data from four undergraduate students each (one from a residence hall, a commuter from home, a commuter from "down the line," and a fraternity or sorority resident): a detailed recall of the prior 24 hour period; a description of time use, hour by hour between 6:00 AM and 2:00 AM for the prior seven days; and a brief demographic questionnaire (age range, gender, major, year in school, living arrangements, child care responsibilities). In addition to gathering the data, students were to write brief case studies on each undergraduate and a brief integrative paper. By the end of the discussion, it was clear that there were at least two major goals of gathering the data: 1) to learn more about how undergraduate students spend their time; 2) to gain some informed perspective on how to gather data on this topic.

Results and Discussion

What did I learn? Nothing startling and nothing definitive. But I have a sharpened sense of understanding on three topics that continue to intrigue me: 1) how undergraduate students spend their time; 2) how to gather data about that topic; and 3) how to work with graduate students who are beginning to conduct research.

Below are a couple of points from each of these topics, as illustrations.

Undergraduate Student's Use of Time. If the 20 students on whom we gathered data are representative of any significant portion of the student body, many of our students do not observe the two-hours-of-study-per-hour-in-class rule we tell them. Our informal data suggest that for many students a 1:1 correspondence is more descriptive.

Faculty members may think students don't do well in their classes because they enter without sufficient academic prepara-tion. Our data would suggest that for some students, at least, the problem is as likely to be the amount of time they devote to their studies as undergraduates. As a sometime teacher of un- dergraduate students, I suspect this problem is more difficult for faculty to deal with: It's easier to blame prior academic preparation than to admit that students aren't doing well in my class because for whatever reason they aren't working very hard at it. Prior preparation isn't my fault; current motivation may be. I do find clues that students aren't spending sufficient time working on my class material to be very discouraging; my conversations with other faculty members suggest to me that I am not alone.

Also, if these 20 students are in any way representative, our students seem to be spending less time working than current campus folklore might suggest, less time watching TV, and more time socializing. One student reported socializing 51 hours the prior week. Obviously, the sample may be biased, though several of the students in the sample were approached as they worked at their campus jobs. Less time watching TV than we suspect is obviously good news; more socializing is not. Since students made up their own descriptors when they recorded their time, what we counted as socializing included "with boy friend," "drinking," "hang around," "go out," and a variety of synonyms.

How to Gather Data on This Topic. As the graduate students designed their method, they discussed the advantages and disadvantages of gathering data from several students on how they spent one day versus gathering data from fewer students on how they spent a week. In the end, their opinions were mixed. Generally, the graduate students felt that having data on only one day would not be representative; they didn't feel they had an accurate picture of how a student spent his or her time by looking at only one day. However, a week is difficult for some students to remember. A few students just couldn't finish the task; others were described as "playful" in their approach to filling our our data collection sheets.

Several of the graduate students felt that they gathered data that were more candidly reported than a faculty member might have obtained. Generally closer in age to undergraduate students and not in positions of authority, the graduate students did generate descriptors of time use I doubt I would have received. (One undergraduate reported this sequence of five hours: arrested, released, drinking, drinking, drinking.) The graduate students' reports validated comments I had heard about our library. Time reported in the library may be either primarily study time or primarily social time. The difference is subtle, as some students head to the library with modest intentions of study but are easily distracted into socialization; these distractions are apparently easier to come by in certain sections of the library than in others. A devoted scholar can find quiet space in the library, and this activity is perhaps more likely to be reported as "research in library" than simply as "library."

Graduate Students as Beginning Researchers. This project was very useful to me as a way to think about involving graduate students in research. As the students designed their study in class, I was struck (again! I've seen this before) by how easily they focused on an instrument with which they would gather data and how difficult it was for them to focus on the question they wanted to study. One member of the class kept reminding the others that they needed a question to focus their inquiry. Her reminders, though not dramatically successful, helped to move the discussion beyond methodology. The graduate students arrived at what I felt was a reasonable method for their study, but I was not confident they all understood why it was reasonable or exactly what their study could hope to produce.

The graduate students generally had very little sense of themselves as researchers or the effect they could have on the outcome of the study. Some graduate students made clear observations of their undergraduate volunteers; others remarked that they gave the students the task and then turned to other duties, seemingly unaware of the opportunity they were missing for observation. In class we discussed how presentation of the task could influence the outcome of such a study; the graduate students seemed to take this as a new idea.

The data the students gathered were raw, and students varied in the degree to which they could summarize the data: from no useful summary directly related to the data; to a summary of hours per week devoted to specific areas; to a conceptual framework of time, with examples from the sample.

Conclusion

What did I learn? My two questions at the beginning were: How can we increase undergraduates' involvement in their own learning? and What are the most effective ways to promote research through graduate education? Certainly I did not find definitive answers to either question. However, what I learned helps me approach these two questions with better information. First, my belief in the usefulness of measuring time as a way of understanding involvement in learning was strengthened; knowing more about how students use their time will help faculty members and administrators understand the undergraduate experience and think about ways to improve it. However, I now think that measuring student use of time in ways that are meaningful and reliable will be more difficult than I had anticipated.

Second, if we want all graduate students to develop habits and skills of research – and I think we should – then I am more convinced than before that we need to involve them more frequently in research projects and activities that hone their research skills. (Generally, at the master's level, we say that we want students to become "intelligent consumers of research." I am more inclined to think that part of the process of becoming intelligent consumers is understanding the research process through experience.) These students did a very respectable job on their study. Perhaps because of their work in counseling and related courses, they were superb at working together to plan the study. They listened carefully to each other and built on what others had said. In this way they were models. It is clear, however, that we could have benefitted from more time in class discussing their process of gathering data, the influence of instrumentation and researcher, analyzing the data, and figuring out what next steps are called for in continuing the investigation. They need more practice in the skills and habits of research than we have been providing them.

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Author Notes

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Weekly Quizzes and Examination Performance In Intermediate Accounting

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For years I have noticed how hard my students work on my course during examination weeks and have toyed with the idea of giving weekly quizzes as a means of motivating them to work that hard more consistently. The material which Intermediate Accounting covers is extensive and technical. Students can ill-afford to fall behind. When they do, they're likely to find it much more difficult to catch up than they expect. Perhaps as important, class meetings can be woefully lackluster and nonproductive when significant numbers of students don't know what's going on.

I've taught two sections of Intermediate Accounting, a required course for majors, every fall semester for 15 years. I spend about equal time identifying and explaining new material and having students work in small groups going over solutions to homework problems. While students are working in the groups, I circulate about answering questions and providing check figures for problems. I usually teach back-to-back sections that meet three times a week. There are two two-to-three-hour evening exams during the semester, which both sections take simultaneously, and a comprehensive final. The exams are made up of multiple choice questions and short problems compiled from a test bank provided by the textbook author. The exam items are tied to specific goals spelled out for students in a class hand-out. Competition for grades is keen and motivation is high, especially during the three exam weeks.

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Method

My investigation of the impact of weekly quizzes on examination performance involved two distinct phases. During the first, I gave three weekly quizzes to one section (selected by the flip of a coin) and not the other, then compared scores on the first common evening examination. In the second phase I repeated the same procedure but reversed the treatments. At the end of the second common exam, then, both sections had taken one exam preceeded by three quizzes and one exam not preceeded by quizzes. All quiz items were selected from the textbook author's test bank, with a mix of multiple choice and short answer problem questions. Finally, after the second exam, I polled students about whether or not they wanted additional quizzes over the final third of the course.

Since many of my students knew each other outside of class and exchanged information about class happenings, I kept both sections aware of the purpose and design of the experiment. I also told them that the quiz grades would be averaged into the ten percent of their grade I describe as "class participation." After each quiz I also posted a copy of the questions and solutions outside of my office.

Results and Discussion

The results of the first phase of my experiment were pretty much as I had expected. The quiz section scored an average of about two points higher than the non-quiz section on the first exam – a modest but statistically insignificant difference. After the second exam, however, I found the opposite of what I expected: the same section (now the non-quiz section) again scored an average of two points higher than the other section. Interestingly enough, even knowing these results, more than 80% of the students in both sections voted to continue the weekly quizzes for the final third of the course. I did give quizzes to both sections over the remainder of the semester. The same section scored higher on the final exam.

I spent a good deal of time and effort after the second exam trying to explain the inconclusive, even contradictory, results. I solicited possible explanations from the students without success. I did an item analysis of the second exam results without finding any single problem or topical area to account for the differences in grades. I discoverd that excluding the most extreme grades did not alter the results. In the end, I looked up the grade point averages of students in the two sections and discovered that the section with the higher exam scores had an average GPA of 2.87 (where A = 4.0) compared to the other's 2.70.

Even though those GPA differences were also statistically insignificant, perhaps the explanation is simply that one class was made up of better students than the other and weekly quizzes were too modest an intervention to have any effect. The common textbook, identical homework assignments, and the fact that quizzes and solutions were posted for all to see probably dampened any potential impact of quizing on exam scores as well. Still, I was very pleased with student reaction to the quizzes. After all had gone through one round of weekly quizzes and an exam, and a round without quizzes, more than 80% voted to continue the quizzes. They apparently felt that the quizzes helped them stay on top of things and kept them informed about their readiness to answer the kinds of questions likely to be on the exams. I agree, although I think the incentive value wore off a bit late in the semester as pressures from other classes increased. I have decided, therefore, to continue the weekly quiz policy, perhaps with some changes in the grade values and frequency of the quizzes. In addition, I may replicate my experiment next fall.

Student Styles and Learning in Two College of Business Courses

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In teaching junior and senior finance and insurance courses, courses which must be applied in their emphasis, I think it important to concentrate on developing problem solving skills. Sometimes this means solving straight-forward, technical problems. At other times I focus on more open-ended managerial or public policy problems. While not wanting to foster a "technical school" mentality, the career orientation of business disciplines makes it appropriate to focus on developing the students' ability to apply course material. An ancillary benefit from this orientation is that it nurtures problem solving and analytical skills generally.

To accomplish this objective, I have sought to involve students in a substantial amount of problem solving in classroom small group activities and in their homework assignments. Informal student feedback indicates that this approach is different from that usually experienced by students in the College of Business Administration. I also have received very different reactions from individual students about how they liked my teaching style and class activities. Undoubtedly, whatever we do or do not do in class is fated to be received differently by different students; however, I am convinced that there must be a systematic relationship between the learning styles my students bring to my classes and the ways they respond to my courses and the teaching methods I use.

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Although there is a substantial literature on learning styles, learning style researchers come from different disciplines, focus on different dimensions of perception and learning, employ different methodologies and instruments, and come to different conclusions about which variables define one's learning style and about their effect on learning. Thus, the research is fragmented and the extent to which learning styles can affect students' acquisition of knowledge in general and learning in specific activities is still highly speculative; nevertheless, the existence of some measurable impact has intuitive appeal.

Two issues are the focus of this study. First, how do different "types" of students respond to the style of presentation and learning activities employed in the courses I teach? That is, how well do different types of students perform in my classes and how do they like what I have them do? Second, can information about students' learning styles enhance my teaching?

Method

As noted, there are several different categorizations of students which can be found in the literature. For this study, three were used: the Myers-Briggs Type Indicator, Abbreviated Version (Briggs & Meyers, 1983), the Learning Style Inventory (Kolb, 1985), and LOGO II (Eison, Pollio & Milton, 1982). They were chosen for several reasons: their widespread usage, the availability of straight-forward classification instruments, my familiarity with the typologies, and my belief that these categorizations might have some measurable association with the performance and attitudes of my students (see Claxton & Murrell, 1987, for a good introduction to these and other instruments). The MBTI uses four dichotomous scales to classify students: (1) extraverted/introverted; (2) sensing/intuitive; (3) thinking/feeling; and (4) judging/perceptive. Kolb's LSI identifies four learning styles – divergent, convergent, assimilating, and accomodating – on the basis of student preferences along two dimensions: concrete/abstract and reflective/active. The LOGO II assesses learning and grade orientations. For this study, students were sorted into high, medium, or low learning and grade oriented groups of approximately equal size on the basis of their scores.

Two junior-level business administration classes were studied: two 40-student sections of a financial institutions course in the fall semester, and a commercial property-liability insurance course with 16 students in the spring. In the financial institutions course, Kolb's LSI and Eison's LOGO II were administered in the second week of the semester. I also collected ratings on a simple 1-10 scale (1 being "terrible" and 10 "excellent") of one small group activity and of the essay and objective sections of the first midterm. Scores on the two midterms and final exams also were available, including subscores for the essay and objective sections. The LSI, LOGO II, and student ratings were administered by someone from the Instructional Development Program so that students could include their names without my knowing any individual's responses. I had expected to collect more student ratings of activities and exams, but it was the first time I had taught the course and in the scramble to keep up I found it difficult to plan ahead for such things.

The LSI, LOGO II, and MBTI (Abbreviated Version) were administered in the second week of the spring semester in the insurance course. The students also rated the two midterms (these examinations contained essay questions exclusively), a small group activity, and a traditional lecture during the semester. I used the same 1-10 scale during the last class period for students to rate homework problems, classroom problem sheets on the insurance contracts and their use in small group problem solving sessions, classroom discussion of the problems sheets, lectures, and other classroom discussions. Finally their exam scores were available.

Results

Almost half of the fall semester students were classified as "assimilators" by the LSI. Such students excel in inductive reasoning. They are good in creating theoretical models after having collected many disparate observations. Assimilators tend to gravitate toward the physical and social sciences. The remaining students were evenly distributed as "accommodators," "divergers" and "convergers." Interestingly, Kolb has found that the business professions are dominated typically by accommodators (Kolb, 1984).

Although LOGO II results showed my students to be somewhat more learning than grade oriented (the means were 45.17 and 43.79, respectively), their scores on both dimensions were higher than those reported by Eison (undated) for another, broader cross-section of college students.

The four Kolb categories and the two LOGO II dimensions were cross-tabulated with the student ratings and test scores described earlier. Only a few comparisons turned up differences which were statistically significant at a 10% rejection level. Specifically, convergers performed better on the essay portions of the last two exams, while the divergers did the worst on every test subscore but the first exam essay and the final exam objective. Although the differences were not statistically significant, the divergers consistently rated the exams most negatively as well.

The LOGO II comparisons did not show any statistically significant contrasts. In general, the high learning oriented group seemed to do better on my tests, particularly the essay portions, and rated them more highly than the other groups. In contrast, the high grade orientation group tended to perform more poorly and respond more negatively to the tests. Student performance on the final examination essay was inversely related to grade orientation.

Results for my spring semester course were limited by the small sample size, a problem exacerbated by some missing observations for the rating measurements. Generally, however, MBTI extroverts (n = 10) and sensing/thinking types (n = 9) liked the small group, interactive activities. There also was a positive relationship between learning orientation and ratings of my lectures. Otherwise, there were no statistically significant contrasts or suggestive patterns.

Discussion

Did my students' performance and rating of these classes vary with their learning styles? While the results were not definitive, there was some evidence that student learning styles did make a difference in how they responded. Students classified as convergers generally did best and responded most favorably to the teaching methods I used. The divergers tended to fall at the other extreme in performance and ratings of satisfaction. In like manner, those ranked highest in learning orientation seemed to respond more favorably than those with the highest grade orientation.

A more thorough study with a larger sample would probably help me resolve some of the ambiguities in these results. Only a few of the learning style categories showed any statistically significant association with class performance or ratings of satisfaction with specific activities. I'd like to see if those same relationships would turn up again. I'd also like to know if particular learning style types, convergers and learning oriented students in this instance, are simply more successful in business school courses like mine.

Nevertheless, I believe that even these modest results have implications for my teaching. As I claimed in my syllabus and opening lecture, I want my students to be able to solve not only technical problems but to be able to analyze some managerial and public policy questions as well. My hope has been that they would be able to synthesize information and opposing opinions on such problems and draft and defend their solutions.

The strong showing of convergers, who are high on "active experimentation," together with the weak showing of divergers, who are high on "reflective observation," suggests that I've not been as successful with that as I had hoped. On the other hand, the success and favorable ratings of the high learning oriented students implies that I have managed to engage successfully with those predisposed to learn and think about the material.

Because student learning styles apparently do matter, more variability in my teaching would be helpful, particularly for the divergers. Where appropriate, having some activities designed to meet the needs of each type of student would be helpful. Also, I need to reflect on the nature of the methods I am using now; they are not doing all that I thought they were in terms of developing and rewarding certain learning skills and tendencies.

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Improving Teaching by Reflecting on Practice[1]

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Improving teaching requires that both faculty members and faculty developers reflect on their practice (Smith, 1983; Smith and Schwartz, 1986). In this paper we want to report on our efforts as faculty developers to help faculty members reflect on difficult situations in their practice. This reflection on practice involves discovering problems, inventing and implementing solutions, and evaluating their effectiveness. Our approach connects reflection and action and is derived from the theory-of-action approach of Argyris and Schon (1974) and the work on reflective practice by Schon (1983,1987).

Schon (1983) proposes "reflection-in-action" as a way of describing how professionals think and act in the complex and ambiguous situations in their practice. When their usual skilled responses don't work, they impose new meanings on the situation in order to make sense of their difficulties. The meanings they impose become the frameworks or "frames" within which they act. These frames determine what they attend to and what they ignore; where they focus their attention and what they accept as movement towards a more satisfactory situation. Professionals take action and they evaluate the success of their actions in terms of how they have framed the problem or puzzle. Schon calls these actions "experiments." Each experiment is assessed in terms of the degree to which it has

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improved the situation, led to the discovery of new meanings, or changed the nature of the questions to be explored. Experimenting in the world of practice continues until the problematic issue which initiated the experiment is resolved.

In our work with faculty we asked them to reflect *on* the difficult situations in their practice in order to identify how they had been reflecting-*in*-action. Effective reflection *in* and *on* action is rigorous; it both generates knowledge which is useful to practice and resolves the difficult situation. "Rigor" refers to the extent to which the process generates valid information. In reflection, as in all good research, conclusions must be connected to data; they must also be subjected to tests of disconfirmation. If reflection is based on information which is not valid, then it will lead to errors. For example, consider a teacher who interprets a student's poor performance as evidence of a lack of motivation. If the attribution is false and the teacher assumes and acts as if it were true, the teacher's way of reasoning and acting is likely to lead to misunderstanding and ineffective communication and problem solving.

Reflection on practice must also generate knowledge that will lead to more effective action. The success of our reflection both *on* and *in* problematic situations can be measured by the extent to which we will be able to generate new actions which resolve the difficulties and improve practice. Our reflections will be inadequate to the extent that they produce insight, theory, or knowledge which does not or cannot lead to new actions.

The way professionals think and act in difficult situations *in* their practice and the way they reflect *on* those actions is determined by their "theories of action." The "theory-of-action" concept was developed by Argyris and Schon(1974) and proposes that individuals:

> ...design actions to achieve intended consequences, and monitor themselves to learn if their actions are effective. They make sense of their environment by constructing meanings to which they attend, and these constructions in turn guide action. In monitoring the effectiveness of action, they also monitor the suitability of their construction of the environment (Argyris, Putnam, and Smith,1985, p.81).

When people fail to achieve their intentions they need to reflect on their theories of action; that is, how they have constructed their meanings and how they have designed their actions.

The data for this article are drawn from a 3-day workshop we conducted to help faculty become more effective in dealing with difficult issues in their teaching practice. We asked faculty to reflect on their practice in order to identify the theories of action that had been informing their practice. We have organized our interventions in the workshop under seven broad headings: Identify a difficult situation, Generate data, Build a diagnosis, Develop and expand it, Move from diagnosis to action, Surface basic values, and Reframe the situation. We conclude the paper with an examination of the effectiveness of a theory-of-action approach to reflecting on difficult issues in teaching in order to improve practice.

Step 1. Identifying a Difficult Situation.

Effectiveness can be defined as the extent to which the consequences of our actions match our intentions. Participants were asked to pick a problematic situation, one where they felt they had not been as effective as they wanted to be, one where they felt disappointed in the outcome or felt stuck with respect to what they might have done differently to improve the situation. What is important here is that each of the participants be personally involved so that they are more likely to be committed to learning and to the outcome of the problem solving.

Step 2. Generating Data.

Information about what individuals were saying, thinking and feeling in the difficult situations in their practice provides the data which are required to identify the participants' theory of action, that is, how they were reasoning in order to act the way they did (Argyris and Schon, 1974). The participants were asked to write up a case study from their teaching practice which described:

a) a difficult and important problem in their teaching,
b) the strategies they used to try to solve it,
c) the barriers they encountered, and
d) a sample of actual conversation that illustrates the problem in a two-column format. On one side of the page they were to write what was said, on the other side any thoughts or feelings that were withheld.

All our illustrations in this article are based on a case which was written by K, one of the participants in the workshop. The case she wrote is reproduced below:

The Case of the Scowling Student

a) Problem: Student who did good work in my class but frequently attempted to show off in class by coming forth with irrelevant information. Student seemed to scowl at me continuously. Made me feel very uncomfortable. I didn't scan his area of the classroom. I experienced that class as less pleasant to a certain extent because of him. Every interchange we had in class was experienced by me as a test of my authority, as radiating hostility from the student.

b) Strategies: I tried to ignore the situation. Said nothing to the student.

c) Barriers: Are students "responsible" for their facial expressions? Was my "interpretation" - this is a scowl - valid? (You're too sensitive.)

d) Conversation: Eventually, on the last day of classes, when I returned graded essays, this student "complained" (then denied he was "complaining") that I gave his paper an A-. This situation occured while two or three other students were trying to speak with me - they were expressing how much they enjoyed the class.

I lost some control and finally said something about what had been disturbing me all semester long: a) the tense interchanges and b) the scowl.

What I Thought or Felt But Did Not Say	**What I and Other Actually Said**
1. I felt hostility coming from the student. I wasn't sure what it was about.	Me: If you want to contest the grade, there's an appeals procedure.
2. His facial expression and comments made me uncomfortable and irritated.	Other: I'm not complaining about the grade. I just want to know why you gave me an A–.
3. Decreased my usual pleasure in teaching that class.	Me: As you can see, if you read the essay and my comments in the body of the text and at the end, you'll find out what I think are the paper's strengths and weaknesses.
4. Wanted to discuss it but felt too uncomfortable.	Other: Yes, but I want to know why you gave me an A–. It doesn't seem fair. I don't think you like me.

Me: I think you should re-read the essay and read my comments and think about them and then come and discuss it with me in my office, in private.

Other: Can I see you now?

Me: I don't have office hours today – I'm in class till 10:00 tonight.

Other: Well, when can I see you?

Me: My office hours are on Mondays.

Other: That's too long to wait. I think you just don't want to see me.

Me: This is not the time or place to discuss this.

Other: But when can I see you? You're making it very difficult.

Me: (Very angry.) You're being impossible. You can't always get your needs met instantly. You should learn to think about your behavior and its consequences. You've been scowling at me all semester.

Other: Me? Scowling? I was just concentrating. I really enjoyed this class.

Me: If you want to discuss this further, come to my office during my office hours.

K's Analysis of Her Behavior

I really feel I mishandled this situation. I should have asked to see the student early in the semester and asked him how he felt about me and about the class. I then should have raised the question of his "scowling". He might have denied it, questioned my interpretation, but I would have had some satisfaction in expressing my discomfort and raising the issue as a case of classroom etiquette.

This description of K's problem situation provided the data required to begin to identify K's theory of action. The way we worked with K and the other participants is reported in the sections that follow.

Step 3. Building the Diagnosis.

Our approach to identifying K's theory of action requires that we develop a diagnosis of how K was reasoning in her case in order to have acted as she did. In K's case we have her diagnosis: she mishandled the situation by not calling the student in earlier and raising the question of his scowling. We and all the other participants agreed with K in this regard. However, from the theory-of-action perspective this diagnosis is incomplete. The challenge in building a theory-of-action diagnosis is to identify how K was reasoning at that time in order not to do what she now sees so clearly as more effective action.

This diagnosis must be built in ways which are consistent with the generation of valid information; that is, it must be connected to the data in the case and tested for disconfirmation. In step 3a we illustrate some of the interventions we made in the workshop in order to make K's reasoning explicit and in step 3b we try to organize K's reasoning.

Step 3a. Making Reasoning Explicit.

Building the diagnosis required that we make sense out of how K constructed her difficulty in the case. We did this by asking questions designed to get the participants to make their reasoning explicit and by illustrating our own reasoning. More specifically, this meant stating the premises and inferences upon which conclusions were based. Our questions were designed to get participants to illustrate any attributions, evaluations or judgments with data from the case. We continued to ask questions until we were satisfied that the reasoning (premises, inferences, and conclusions) was explicit enough that it could be disconfirmed by other participants, by us, or by K.

The following two excerpts were selected from the transcript of the workshop as illustrations of how we intervened to get the participants to make their reasoning explicit or to make our reasoning explicit. The column on the right provides our interpretations of the workshop dialogue on the left. In the dialogue "I" refers to either of the workshop leaders, K refers to the author of the case, and the other letters refer to other participants in the workshop.

Excerpt A

Workshop Dialogue	**Our Interpretations**
I. You were saying earlier she feels her authority is threatened, she feels uncomfortable. What does she do?	I repeats participant's comments and asks for specific behaviors.
M. During the semester she is immobilized, backed into a corner.	M provides an unillustrated evaluation/judgment.
I. What does she in fact do?	I requests illustrations from case data.
M. Nothing. She doesn't do anything. She avoids his gaze in class.	M illustrates the "nothing" with case data.
I. Okay. She avoids his section in the class and therefore looking at him. What else does she do?	I acknowledges the illustration and asks for any others.
M. She tries to ignore the situation.	M gives another illustration.
I. The situation being the scowling?	I checks the meaning of "situation."
M. And the testing of her authority.	M extends her meaning with more data from case.
I. Avoids confronting the testing of her authority and withholds she is doing this. She does it and she doesn't say she is doing it...These are strategies for dealing with her uncomfortableness. So she withholds that this is what she is doing.	I attributes intention to K and identifies an action strategy (that K and others may be unaware of and which will need to be checked.)

Excerpt B

Workshop Dialogue	**Our Interpretations**
I. She says "I feel my authority is threatened." Is that the language she uses?	I requests specific data from the case.
P. "Every exchange in the class is experienced by me as a test of my authority."	P quotes directly from case.
I. It would be more accurate to say that she experiences her authority as being threatened. Would you accept that she doesn't test that the authority is being threatened?	I connects his meaning (untested attribution) to data and asks for confirmation.
P. Yes.	Confirmation.
I. She assumes this is true and doesn't test it. She assumes and acts as if it were true. Would you accept that?	I adds to his analysis and asks for disconfirmation.
P. I think she acts as if it were true. I have a problem with how would she test it?	P confirms I's reasoning but questions how to produce a test.

Explicit reasoning requires that all attributions, evaluations, and judgments be illustrated with data from the case. Our interventions were designed to get the participants to make their premises and inferences explicit and to illustrate and test our inferences and conclusions.

Step 3b. Organizing the Reasoning.

One way to represent the reasoning that informs action is to develop maps which indicate the consequences that flow from the strategies chosen to deal with specific situations. The maps below are based on the previous excerpts.

Excerpt A Map

Situation ---→	**Action Strategies ---→**	**Consequences**
student scowling	>ignore scowling	>feels immobilized and frustrated
feels authority is threatened	>avoid his section of class	
feels unconfortable	>doesn't confront	>no change in situation
	>and witholds she is doing all of this	

Excerpt B Map

Situation---→	**Action Stages---→**	**Consequences**
when K experiences student as attempting to test her authority	>assume she is correct	>misunderstanding
	>doesn't test	>misunderstanding
	>act as if she is correct	>little learning or change

Step 4. Developing and Expanding the Diagnosis with K.

So far in the workshop K had written up a case of a difficult teaching issue and we had worked with the other participants to build a diagnosis of K's problem, while K listened. We then invited K to react to our diagnosis. Essentially K's reactions could be characterized as 1) confirming parts of the diagnosis, 2) adding information or correcting misunderstandings, 3) identifying important learnings and 4) acknowledging the consequences of her actions. We want to illustrate these reactions with excerpts from the transcript.

Workshop Dialogue	**Our Interpretations**
I. My advice to you would be for you to be hard on us. By hard I mean make us illustrate our judgments. The other thing is make us produce our advice. ...don't let us get away easily by just giving you abstract advice.	I invites K to confront our disgnosis and to go beyond it to action.

K. O.K. I mean this is hard but I don't think I feel too defensive about it. That stuff about "avoids his section of the class," "ignores the situation," seems totally correct...makes a lot of sense to me.	K acknowledges her difficulty in staying open to learning and confirms her strategy.
(later on)	
K. And by adding the part that this is withholding, that adds new information. I knew already about avoiding more confrontations. I didn't realize until you said it that this is a form of withholding. I think that is a serious addition to what was going on there.	K identifies becoming aware of her withholding as an important learning.
(later on)	
K. My position was immobilized in that it left all of those things (unsaid). I feel quite comfortable with that.	K acknowledges consequences in diagnosis.
(later on)	
K. I did not experience my authority as being threatened. I experienced the student as attempting to threaten my authority with his questions and statements.	K modified the diagnosis.
(later on)	
K. What was going on there, what I believe is true as you have stated it, is that I assumed stuff about what that meant for the student, I didn't inquire, I didn't test it. I acted as if it was true. All that is quite true.	K acknowledges the meanings that we imposed on her reasoning and behavior.

I. What we're trying to do here is understand your reasoning about what the student did and to trace it through to your getting angry, and feeling immobilized. It probably happens quickly. There is a sequence there in how you make meaning of this student's shrugs.	I restates our strategies for building a diagnosis.
K. I see that. I made assumptions about what his verbal and non- verbal behavior meant which I did not test. I simply assumed that this is a scowl. The asking of questions, the showing off. I was really certain that the remarks he made to the class were intended to be irrelevant.	K acknowledges her untested attributions and evaluations.
I. You're doing more than that. If we pick up the anger, and you experienced the class as less pleasant and blamed the student for that, you're holding your student responsible. You close that off as the case was written.	I extends the diagnosis by identifying K's responsibilities for the outcome.
K. There were times when he wasn't there when I felt the class was much more pleasant. But that doesn't prove that his presence is responsible for my feeling. And with all this additional information, then I can own my responsibility for not making that class less problematic.	K acknowledges her reponsibility.
I. I think this diagnosis is also saying how you disempowered yourself.	I identifies K's feelings of helplessness and lack of responsibility as the consequences of her way of reasoning in the situation.

K. Yes.	I. He is not doing it to you. If you reason this way you are going to disempower yourself. So it hooks back to a personal issue and that is how you handle conflict.
(later on)	
K. What I'm trying to get at is something that was uncertain to me before we started all this and still is a little uncertain. I know that different people respond in different ways, people are more aggressive, question more, and so on. It's within the realm of possibility that his behavior, his way of asking questions and so on was not intended by him as a test of my authority or anything like that. I accept that these are attributions about hostility.	Earlier K acknowledged she didn't test her attributions and evaluations. Now she acknowledges they may have been wrong.

By illustrating our diagnosis of K's reasoning and action and then checking with K for disconfirmation, we were able to generate with K a diagnosis which she accepted as valid. She acknowledged that it gave her new insights into the counterproductive ways she had been reasoning and acting. If we are to be helpful to K we must work collaboratively with her to generate information about her actions which she accepts as valid, since K will be the one who ultimately takes the actions to improve her practice.

Step 5. Moving from Diagnosis to Action.

Problem solving in action science involves not only diagnosing the problem but also inventing and producing actions to solve the problem. A considerable amount of time was spent on generating diagnoses for K's case. The diagnoses suggested that K made attributions and evaluations that she didn't test, she withheld these attributions and evaluations and withheld that she was withholding them; yet she behaved as if they were true. This strategy was self-sealing. It led to immobilization and feelings of frustration, uncomfortableness, and helplessness; yet none of this was discussed. K's efforts to control this situation, both her behavior in the class and her emotional reactions, eventually caused her to do just those things she was trying to avoid ("I lost some control and finallly said something about what had been disturbing me all semester") and to hold the student responsible. K acknowledged this diagnosis and following the advice we had given her, eventually said to the group.

> Well from the beginning, the first or second time there would be an interchange between the student and me that made me feel uncomfortable, where something he says or his non-verbal behavior is triggering some negative feelings in me, I want to ask my consultants what they think I should have done at that point.

The excerpts which follow illustrate the suggestions offered by several of the participants for what K might say to the student. We wanted to ensure that these suggestions were at the level of productions (the words K could say to the student) and not at the level of inventions (abstract recommendations such as "be direct" or "confront"). We assessed these productions by the same criteria we had used on K's case; that is, were the attribu tions, evaluations, and judgments illustrated and publicly tested.

Workshop Dialogue	**Our Interpretations**
B. I think you answered some of it yourself at the end of the case. You did some testing by actually confronting him and saying "you've been scowling at me all semester."	B recommends K state her evaluation (without illustration or inquiry.)
I. Is that what you are advising her to say?	I conforms that B is recommending this as a production.
B. Well at the very end, after she had gone through all of this emotion with anger she asked that. But if she had asked him before (she experienced the anger)....	B recommends doing it earlier, before the anger builds up. B doesn't say how to "ask."
K. I wouldn't say that at this point (in the semester) because we're still having questions about my interpretations of his actions. He may respond with this look when he is concentrating.	K rejects this now because she is not confident that his look is, in fact, a scowl.

(later on, in response to B's suggestion)

K. I wouldn't put it like that now. I would have been much more active. I would have asked to see him privately because I feel uncomfortable doing that kind of thing (in class). But I'm not sure how I would have put it.	K is uncomfortable with confrontations in class, and doesn't know what to say in private.
I. Let's give this person a name. "Harry, you just asked me a question, I thought I gave you an answer and now I see you reacting in a way that I don't understand. Can you help me understand what it is about my answer that leads you to whatever, slump or scowl, or frown?" Would you say that to him?	I offers a production which invites the student to help clarify gaps in I's understanding of the situation. I illustrates the gap with data.
K. Yeah that's better. "I wasn't slumping, scowling, or frowning. I just dropped my pencil."	K believes the student will disagree with her interpretation by offering an "acceptable" explanation.
M. You think he would deny it. B. You don't believe his answer.	Two participants, M and B, infer that K will hold her interpretation as the true one and will discount or not believe the student.
K. I don't believe it was a look of concentration.	
M. How about if we focus on basically how his behaviors affect you.	M suggests a strategy.
I. Produce it, M.	I asks what M would say.
M. "Harry, yesterday in class when you asked this and I told you about the various citations, you went like (non verbal). That really jolted me. I didn't understand whether that was a signal of defiance, whether you were angry with me and it really put me off. Did you mean to do that?	M's production starts by accepting as true at least one of her interpretations of the student's behavior (defiance, anger). M identifies the consequences (jolted, put off) that follow. M inquires about the student's intentions (but not about the accuracy of her interpretations).

Our interventions at this stage were designed to get the participants to try to produce their solutions, to generate the words they would say to the student, and we offered our own suggestions. One criterion for a good diagnosis is that it leads to more effective action. If the diagnosis of K's problem is that she did not illustrate or test her attributions or evaluations (and K agrees) then the actions to solve K's problem would involve illustrating and testing.

However, the situation is complicated. It is not enough to "learn" new strategies (illustrate and test) without changing the underlying governing values. Illustrating and testing can be used to try to control the student rather than to generate valid information. A statement like "the student will deny it" indicates to us that K and the other participants still hold their interpretations as the truth and will only accept the student's acknowledgement of their truth as a satisfactory solution. To say this another way, their goal was to control the situation and the student, to get him to agree with their interpretation, rather than to subject their interpretation to a real test. This point is illustrated in the following excerpt:

Workshop Dialogue	**Our Interpretations**
I. The piece I'd like to pick up on is that (you) assume it's true and that he'll agree when you say "When you went like that (non verbal)." I would check that first.	I points out another level of assumptions that needs to be tested.
K. In what way?	K asks how to "check".
I. By check I mean "I saw you go like (non verbal). Do you agree you did that?" Was he even aware he did that?	I illustrates one way to check the assumption.
M. Okay, your intention is a bit different from mine. I have a devious intention, that is, even if he denies it, damn right he's not going to do it again in the next class... You have a much more constructive intention. Your intention is to really verify information. My intention is just to let him know that I'm really watching him. He's going to be called for it.	M reveals that her goal (or governing variable) is to control the student's behavior in class.

This is not to suggest that K's original interpretation may not have been accurate nor that the student would not deny it. Rather it is to say that action in the service of valid information and informed choices (by both K and the student) would look for ways to disconfirm one's conclusions rather than label the other's answers as denials.

If the teacher tries to control the student by making evaluations and attributions which she is unwilling to test, yet behaves as if they are true, then we would say that the teacher is behaving defensively and is not open to learning. She is protecting her interpretations and is not willing to listen to other points of view or to examine what it is in her behavior that might be producing the student's reactions. The teacher's controlling behavior may very well lead the student to get angry or defensive, or withdraw from learning, but we would argue that the teacher's reasoning and behavior are partly responsible for producing these consequences.

Step 6. Surfacing Underlying Values.

The participants acknowledged that their strategies (such as not illustrating or testing their attributions) were likely to lead to counterproductive consequences (miscommunication and misunderstandings) for effective problem solving. However, they were unable to create, during the brief period of the workshop, any sentences for K to say to the student which either we or they considered satisfactory. They agreed that valid information was a necessary criterion for effective problem solving. Yet they continued to produce sentences which, when challenged, even they would agree were inconsistent with the goal of generating valid information.

We believe that the participants were unable to produce "effective solutions" because of the basic values which governed their actions. Through discussions in the workshop and readings, we advocated that behavior such as not illustrating or testing your evaluations and attributions is consistent with trying to win unilateral control of the situation and the student. Behavior such as withholding your discomfort or anger and withholding that you are withholding it are strategies consistent with trying to protect yourself and the other person and to avoid dealing with negative emotions.

Acknowledging that one is ineffective is difficult, but it is even more difficult to accept that the reasons for your ineffectiveness are underlying values which are inconsistent with what you espouse. This is reflected in some of the comments made by the participants during the workshop:

> K. The more I think about it the more I'm skeptical that I failed to act in so many ways....the psychologizing of it really bothers me a bit....some very nasty assumptions underlying my thinking....loss of control was loss of my self control, not I think

> loss of control the way Argyris (1982) means it....I'm uncomfortable with the psychologizing about everything that was going on in my head and what it means.
>
> (later on)
>
> K. I came away from yesterday feeling that I had really laid myself on the line in that particular case with these people that I don't know and wow! That really felt hard....reading that paper (Argyris) and not knowing any of that stuff made me feel even worse about my failure....I really failed....
>
> I. And felt ashamed.
>
> K. Yes.
>
> (later on)
>
> B. How do you deal with your sense of shame? Not just ashamed of having blown it, but to be ashamed of the reason. K shared it with us. She feels even worse because it's not just her, it's in this room (public). I'd feel very bad about things like that.

Discovering that your behavior is inconsistent with the values you espouse can be surprising and upsetting. If your governing values are to be in control, to protect yourself, to win, then discovering these inconsistencies in public can be painful. You cannot avoid the pain by denying the inconsistencies if you have collaborated in the diagnosis and believe it to be fair and accurate.

Step 7. Reframing the Situation.

If either we or K try to avoid the pain or embarrassment, then we are likely to shut down inquiry and learning. Our strategy was to acknowledge K's feelings and to connect these feelings to the way she was thinking about her "failure." We tried to offer her new ways to think about her situation, to "reframe" it in ways which would lead her to more learning and to less pain. We reframed the concepts of competence and error in ways that were consistent with generating valid information and effective problem solving.

> I: Yes, I think you will feel that way. I think part of it has to do with your conception of what it means to be competent. Most of the time, I am very successful in doing what I try to do. Once in a while, I blow it. Those are the things that I pay all my attention to now. And, for me, how I deal with those issues becomes the measure of my competence. It's not that I blew it, because we'll all blow it sometime, nobody has that level of perfection. It's what we do when we blow it. The tendency is to hide it (your

incompetence and failure) and cover it up and that just makes it worse because you don't learn from those situations. What you do is you go inside and you say "Oh no, I blew it," without getting any data from other people who might have the information. So that if you can, and I don't think that this is easy, change your behavior to think about competence as what do I do when I make a mistake? Mistakes are opportunities to learn. We keep telling our students that. Don't be afraid to make a mistake – it's just an opportunity to learn. Argyris and his colleagues have developed an elaborate map for looking at errors called "Dilemmas of Learning" (Argyris, Putnam, and Smith, 1985, p. 276)...One way is to view errors as puzzles. I'm upset that I blew it here but it's a puzzle and it's an opportunity to learn so I'm going to dig in. Another way is to view errors as crimes to be covered up, so you should hide when you're wrong. The latter frame around error will get you into trouble in terms of learning and problem solving. It's our intention to help you learn by examining how you are reasoning. That may make you uncomfortable at times. But it is not our intention to make you uncomfortable; it is to help you learn.

K: I know that and I didn't feel I was being attacked. I certainly offered myself.

The excerpt above advocates a different way of thinking about competence and error. The next excerpt illustrates how a commitment to generating valid information can be the criterion by which disagreements and denials are resolved. It reframes "confronting the student" as inquiry in the service of learning and problem solving.

M: The part I don't understand is: "Is it (your conclusion) only valid when the other person agrees that you and he have the same interpretation?"

I: No, absolutely, not.

M: What are the other ways that you can say that I have valid information even though they are denying it?

I: You present the data and your interpretation and you ask them to disconfirm it. You don't want to make the standard just that the other person agrees with you. Because that allows the other person to control you. All they need to do is say, "No, you're wrong." What you want to do is check the data, and your interpretations. So the person says, "I don't agree." So you answer, "What explanation do you have to account for this behavior? Give me another explanation. I'm willing to accept that mine might be wrong, but I want to know what explanation might be right." The person says, "I don't have any idea," or "You're just wrong." Then I would say, "I don't see how I can help you learn if you continue to behave in this way and don't offer any explanation." You don't give the person the power to control you by simply disagreeing with you. You say, "What information do you have that would contradict my reasoning?" I've data, logic, and conclusions. You have said "I don't agree. I understand that you don't agree. What is it that you don't agree with? You don't agree with the data?" He says, "Oh no, I did that." "You don't agree with the reason?" He says, "Oh yeah, I agree with that." "You don't agree with the conclusion?" Then, "Tell me how you get from here to someplace else." And I think then you're tough, and if the person is unwilling to present other data, reasoning, or conclusions, and continues to disagree, then I would say, "I don't know any way to work with you to resolve our differences."

So far in this paper we have demonstrated how our frames about increasing professional effectiveness and problem solving informed our strategies in one segment of a faculty development workshop. We illustrated how we were reflecting in the action of the workshop. In summary, our interventions were designed to have participants

1) identify a problematic situation of some importance,

2) generate data about their actions in the situation and their interpretations of those actions,

3) build a diagnosis of the problem which makes the underlying reasoning explicit and organize it into an action map,

4) develop, refine, and expand the initial diagnosis,

5) move from the diagnosis to the invention and production of new actions to solve the problem,

6) examine these new actions and surface any inconsistencies with espoused values and beliefs, and

7) consider alternative ways of thinking about and acting in problematic situations in such a way as to promote more effective problem solving and learning.

Our Reflections on Our Actions

All our actions in the workshop can be interpreted as experiments initiated in view of how we had framed the problem of helping professors to improve their teaching. We now want to reflect *on* our actions in the workshop by presenting our interpretations and assessments of the participants' reactions.

We framed the solution to the problem of increasing teaching effectiveness as being: reflect on your practice in difficult situations. Since how professionals reflect on their practice is determined by their theories of action, our actions were designed to identify the counterproductive features in the teacher's behavior and in the underlying reasoning that informed that be havior.

All our actions in the workshop could be seen as action experiments designed to test the adequacy of our way of framing the solution to the problem of improving teaching. These tests were carried out in ways to ensure that both we and the participants agreed we had generated valid information. This is essential to ensure rigor in action experiments.

As we interpret the results of our experiments, we believe we were successful in getting the participants to *recognize* and *accept* their action strategies of making attributions and evaluations without illustrating or testing them, and of behaving as if these were true. They *acknowledged* the counterproductive consequences of these strategies for learning and problem solving. However, the participants were unable to *produce* more effective actions even after they were aware of alternative strategies such as illustrating and testing attributions and evaluations.

This outcome leads us to the conclusion that our original frame was incomplete. The identification of counterproductive features in the way you reason and the invention of alternative action strategies is not enough to enable participants to produce more effective action. Our frame for the solution to the problem of increasing teaching effectiveness needs to be expanded. It should include the identification (and change) of the *underlying values* of the theory-in-use that informs these counterproductive strategies and holds them in place.

This revised frame would lead us to make additional interventions the next time we run such a workshop for faculty. These interventions would be designed to go beyond identifying how the undesired consequences were the result of the strategies used. We would connect the strategies the participants were using to the underlying values these were designed to satisfy. The following two samples illustrate the type of interventions we are suggesting.

Sample Intervention 1

I: K, when you say that the student will not admit he was scowling or frowning by saying "I just dropped my pencil" or "That's how I look when I'm concentrating," are you saying he is more interested in protecting his version of the facts and that he will not own up to the truth?

Assume K says yes.

I: I see you using the fact that he will deny what you say he did as a reason for not testing the validity of your interpretation. If that is true, then you are protecting your version of the truth. You are behaving in the same way that you criticize the student for behaving. Does this make sense to you?

Sample Intervention 2

I: K, in your case write up you criticize the student for expressing his negative emotions and judgments and for trying to influence or control you and the situation. Would you agree?

Assume K says yes.

I: I infer that you are also trying to control the situation. You do this at first by withholding your negative judgments and emotions. Eventually you try to control the situation by expressing your negative judgements emotionally. You are behaving in the same way that you criticize the student for behaving. Do you agree with this analysis?

Assume K agrees.

I: The alternative that we are proposing is that you share the control by striving to produce the valid information necessary for free and informed choices by both you and the student. Inquiry and problem solving are at the core of this approach. It requires both of you to illustrate and test the validity of your attributions and evaluations.

We will be able to assess the adequacy of this revised frame and the new interventions by examining how faculty members react in future workshops.

In this paper we have proposed that increasing teaching effectiveness requires that faculty members reflect on their own practice as teachers. Faculty developers also need to reflect on their practice of trying to help faculty. The theory-of-action perspective directs reflection on practice to the identification of the counterproductive features in how professionals reason in order to act as they do. Thus, in our analysis we focused on how faculty members were reflecting *in* the difficult situations in their teaching practice. This paper illustrates how the theory-of-action perspective influenced our reflection-*in*-action in our working with faculty, how we were reasoning in order to act as we did.

Cross (1987) has called for faculty to take more responsibility for improving teaching by becoming "classroom researchers," that is, by assessing the effectiveness of their actions in producing student learning in their own classrooms. Reflection on practice as we have described it is a form of classroom research. In this paper we have identified some of the features this reflection must have in order for it to improve teaching practice.

Notes

1. The research reported in this paper was made possible by a grant from the Professional and Organizational Development Network in Higher Education. A version of this paper was presented at the American Educational Research Association Meetings in New Orleans, 1988.
2. Conducting the workshop and writing this paper were done collaboratively and the order of authors on the paper does not signify any priority.

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PART II FOSTERING STUDENT INQUIRY

The world has no shortage of reform advocates exhorting teachers to promote "active student involvement in learning." Most teachers would love to have active, involved students. But student reticence in class is notorious and figuring out how to overcome it (or bypass it altogether) is a nontrivial task. The two articles in this section suggest very different approaches to the task.

Questioning is an essential step in critical thinking, but most professors find their students rather willing to take what they hear or read at face value. Susan Brodie analyzes the problem and offers strategies for helping students learn to ask questions. Her approach can be adapated to the study of just about any discipline.

Don Wulff and Jody Nyquist provide a careful description of the use of field methods to involve students deeply in the inquiry strategies of a discipline. Their thoughtful, imaginative planning of the course is a model of professional practice; and the structure they outline suggests possibilities for any faculty member who teaches in a subject where field methods are appropriate.

Using Field Methods as an Instructional Tool

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As instructional development specialists, we are frequently called upon to assist in course design and to recommend a variety of teaching strategies that instructors can use to achieve course objectives. Although most of us can readily suggest ways to work with methods such as lectures, textbooks, discussions, audio-visual materials and demonstrations, we tend to overlook less familiar instructional tools that can be incorporated into the design of courses. One such instructional tool that has not received adequate attention as a potential teaching strategy is the use of field methods that enable undergraduates to function as researchers while learning the content of a course.

Traditionally, field study methodology has been used by such science disciplines as archaeology, biology, marine biology, forestry, geology, and others to enable students to observe, analyze, classify, and report naturally occurring events in the environment. These long-term studies, not to be confused with the occasional "field trip," provide students with a rigorous experience in systematically applying a researcher's tools and/or practices to an object of study, whether it be taking part in archaeological digs, charting whale migrations from an oceanography vessel, or assessing the devastation caused by gypsy moths. In each case, undergraduates profit from discovering for themselves, through hands-on experience, the meaning of concepts explicated in a particular course. Although field-based learning is often expensive because of the logistics involved, professors and students alike testify to the power of such learning processes.

From *To Improve the Academy: Resources for Student, Faculty, and Institutional Development*, Vol. 7. Edited by J. Kurfiss, L. Hilsen, S. Kahn, M.D. Sorcinelli, and R. Tiberius. POD/New Forums Press, 1988.

In disciplines other than the sciences, similar field study methods have been used to observe, analyze, classify and report human behavior occurring in natural environments. Typically, such methods are presented in graduate level, primarily qualitative research methodology courses, in disciplines including anthropology, business, sociology, psychology, education, speech communication, social work, architecture, and others. These field study methods, however, can be and have been successfully incorporated into undergraduate classrooms as instructional strategies designed to involve students in mastering course content in various disciplines.

Defining Field Methods as an Instructional Tool

As the name suggests, field methods are used *in situ*, in the actual setting in which a particular phenomenon of interest occurs. Philipsen (1982) suggests that the investigator who uses such methods "deliberately spends as much time as possible in the theater of observation" and "becomes personally involved with, or at least exposed to, the phenomena of interest" (p. 9). Although field researchers can use a variety of techniques to collect data, common field methods include observing, interviewing, and collecting documents in a specific environment.

The use of field methods as an instructional strategy, then, entails getting students into a setting where they can collect information about a particular component of the course curriculum by observing, interviewing, and/or examining written materials. Some variation of the method is used whenever we ask students to observe or conduct interviews outside a classroom. However, when we think of the use of field methods as a learning tool as well as a research tool, we think of the student as a researcher who will learn in a setting outside the classroom, while simultaneously using the information garnered to contribute to the development of the course content in the classroom setting.

Field methods are particularly potent in courses where students can observe human processes or interactions. For example, a psychology instructor who wants students to be able to identify sources of positive and negative influence on the development of self-concept may ask students to conduct interviews or observe children in a variety of contexts. An education instructor who wants future teachers to be able to describe how lessons plans are implemented in the classroom may ask students to observe and/or interview teachers. Finally, an instructor who wants students in an organizational communication class to be able to explain the dynamics of superior/subordinate relationships may want students to observe superior/subordinate relationships in an organization.

Although field methods might be incorporated in such courses in a variety of ways, it is sometimes difficult to imagine how a course that uses such methods might be structured. The following case, then, illustrates the use of field methods as a way of achieving important course objectives in a course taught by one of the authors of this article.

Using Field Methods in a Speech Communication Course

The use of field methods as an instructional tool is a strategy central to a speech communication course entitled "Communication in Children's Environments." The course, designed primarily for juniors and seniors who intend to work closely with children, focuses primarily on the development of communication in children 5-12 years of age. The general goal of the course is to help students understand how communication abilities develop in children and how communication competence in children can be facilitated.

As the instructor began to plan her course to accomplish the general goal, she identified the specific outcomes she wanted her students to achieve during the course. As a result of her course, she wanted students to be able to:

1. Describe what "kid society" is like;
2. Identify the reasons why children communicate in various contexts;
3. Identify communication competencies needed by children in a variety of contexts;
4. Explain cognitive and communication development and a functional perspective of communication competence;
5. Compare and contrast a functional perspective of communication competence with the reality of "kid society";
6. Explain how to foster development of functional communication competence in children;
7. Describe ways to assess children's communication competence.

In addition to identifying these very specific objectives for her course, the instructor also outlined some more global educational goals she hoped to accomplish through the design of her course. She hoped to make the course intellectually stimulating by involving the students in their own learning, by encouraging them to think about and challenge the content of the course, and by providing activities to assist them in developing and supporting their own conclusions.

With these objectives and goals in mind, the instructor began to determine appropriate instructional methods to assist students in mastering the content. Although she initially felt that much of the information could be relayed simply through reading, lecture and discussion, she wanted to involve the students more directly in determining what "kid society" is like and what skills children need in order to communicate competently. In order to enable students to describe for themselves the society, the reasons why children communicate and the competencies needed, the instructor decided to have students observe in various contexts where children are communicating. Thus, to provide the information necessary for students to achieve the first three specific objectives of the course, the instructor incorporated data gathered in the form of students' field notes. In addition to providing "hands on" learning, then, this approach also empowered students to assist in creating content for the course.

Once the instructor made the decision to use field methods to accomplish the first three course objectives, she planned how to use other instructional methods in the course. She reasoned that although information that students generated in the field would be an important part of the course, it could not provide all the information necessary to achieve the course objectives. She, therefore, decided to use the textbook and lecture-discussion methods to provide students with essential information about children's cognitive and communication development and about the functional perspective of communication competence. This information also provided frameworks for the field studies. Through these methods, she reasoned, students would be able to accomplish the fourth major objective of being able to explain cognitive and communicative development and a functional perspective of communication competence.

Finally, the instructor decided to use interactive methods to enable students to compare and contrast the results of their observations with the frameworks presented in readings and lectures and to develop their own perspectives. She planned to have students present their own tentative hypotheses and conclusions in class and small group discussions. An important part of that process would be synthesizing the field data and comparing and contrasting it with the information presented in the text and lectures. In an effort to get students to balance their thinking with ideas generated in the course, the instructor decided to require students to work in groups to produce a paper that explained how communication competence should be fostered and assessed. Thus, the total course design included lecture, teacher-led discussions, small group activities, and written assignments, with a strong emphasis on field study.

To enable students to perform as researchers, the instructor arranged to dedicate class time at the beginning of the quarter to a presentation by a researcher experienced in field methods. The researcher explained to the students what it means to enter a natural setting in response to a question and collect, classify and report data systematically. Part of the presentation focused on taking field notes, including what to record, how to separate observations and inferences, and how to formulate tentative hypotheses. In addition, the researcher showed students how to analyze information from field notes by classifying it into categories and looking for themes within the categorized data. Finally, the researcher explained how students could present the results of their observations and support their findings with specific evidence from their field notes.

To allow students to fulfill the field study component of the class, the instructor released students for one hour each week to observe elementary-age students in a variety of settings ranging from informal environments such as ice cream shops, swim team turnouts, Brownie and Boy Scout troop meetings, and various organized sports programs held at community centers to the more structured Sunday School and elementary classroom environments. The following set of questions guided students in their collection of data:

1. How would you describe the "kid society"?
2. For what purposes do children communicate?
3. How do the children you are observing reflect what experts say are age-appropriate communication behaviors?
4. What are some instances in which children are informing others?
5. What are some instances in which children are expressing their feelings to their peers, siblings, other children or adults?
6. What are some instances in which children are persuading others?
7. What are some instances in which children are using imaginative or ritualized communication behavior?
8. What are some instances in which you believe adults are communicating effectively with children? What is happening? What are the implications?

At the beginning of each week, students brought their previous week's field notes to class and participated in a synthesizing teacher-led discussion covering the assigned question. Often student contributors displayed a large set of qualitative data on the board and analyzed it collectively in an effort to find themes and patterns which would provide insights into children's communication development and competence. During this process the students generated tentative hypotheses and tested them against "expert explanation" derived from the textbook and lecture materials of the course, the data represented in the day's discussion, and their own additional data collection experience. The discussions, which were always lively, were based on rich data collected on real children operating in natural environments; they included a comparison of expert knowledge and student-generated observations as the instructor intended. Week by week students grew more confident in their ability to observe, analyze, classify and report data and to challenge textbook author and course instructor opinions and conclusions. In actuality, the class became a giant research team of twenty-five members collaborating to find insights into the development of communication competence in children.

In both the midterm exam and the final paper the instructor asked students to express their conclusions about children's communication development and competence derived from the field study discussion. Thus, the field study method employed in the class helped generate the course curriculum.

Advantages of Using Field Methods as an Instructional Strategy

In addition to helping the instructor achieve the most immediate course objectives, the use of field methods as a teaching-learning strategy also allowed the instructor to achieve some of the more general educational goals. First, the use of field methods provided motivation for the students to get more directly involved in their own learning. In its 1984 Report, the Study Group on the Conditions of Excellence in American Higher Education recommended that one of the three critical conditions of excellence was student involvement and that "Faculty should make greater use of active modes of teaching and require that students take greater responsibility for their learning" (p. 27). These sentiments have been echoed by practitioners who have in their classrooms successfully incorporated methods that eliminate student passivity (Kraft, 1985; Phoenix, 1987). Furthermore, Meyers (1986) suggests that to develop motivation, "students must actively struggle with real problems and issues" (pp. 8-9). The use of field methods in the communication course actually allowed students to be engaged in the real issues of developing communication competence in children. Instead of being passive receptacles for knowledge dispensed in the classroom, the students were researchers involved not only in the field where they collected data, but also in the classroom where they sorted, classified, and synthesized information they obtained in the field. They learned to compare and contrast the content from the field with that they were exposed to through textbook authors and instructor explanations in the classroom. In many instances, the learning was a collaborative process in which students worked together to understand communication competence in children more fully.

A second advantage was that the instructor got the students to think critically about communication competence in children. In his book on teaching students to think critically, Meyers (1986) suggests that instructors should provide opportunities for students to practice critical thinking skills and attitudes in specific disciplines; in the case of the communication course students had opportunities to think like communication scholars who want to foster communication competence in children. As students gathered data from the field, analyzed it, and brought their tentative hypotheses to class each week, they were able to interpret their findings in terms of frameworks presented in class and to ask questions and seek answers to the larger question of how one fosters and assesses communication competence in children. Also, using basic field methods provided students with a way of thinking about the research process in the discipline of speech communication, including collecting and analyzing data, testing and validating hypotheses, and presenting results.

A third advantage that the instructor obtained in using field methods was increased consistency between what was discussed in the classroom and what happens in the real world. In the 1987 American Educational Research Association Presidential Address arguing that schooling is becoming isolated from what exists in the world outside the school, Resnick (1987) contends that school learning often focuses on symbols detached from their referents in "any meaningful context" (p. 15). As a result, students frequently study information that does not generalize to the world outside the classroom. In the communication course, students may have read the textbook, listened to the instructor, or even tried to cite examples that they could remember from their own childhood experiences; yet, the information may not have been representative of the issues and problems of the real world. However, when these students collected data in natural settings, they obtained a much richer sense of the phenomena; and through their discussions of their findings in class, they could be more confident that their decisions regarding fostering and assessing communication competence would translate to the actual needs of the "kid society." In the communication course, then, learning was enhanced, as Drake (1983) suggests, by "stressing relationships between classrooms and the world 'out there'" (p. 271).

Although the use of field methods allowed the communication instructor to achieve these general educational goals as well as her specific course objectives, she did not incorporate such methods without careful consideration of the role they would play in the overall course design. Because the use of field methods as a learning-teaching tool is an atypical instructional strategy, instructors need to plan carefully for the use of such methods. In some cases, extensive use of field methods as a teaching tool in a specific course may require restructuring the entire course with great variation from more traditional methods that center on the teacher or the textbook. Minimally, use of the methods requires training students in field study research methods. The following discussion, then, identifies some of the major guidelines to be considered in assisting instructors in their use of field methods as an instructional tool.

Guidelines

Objectives

It is important to have instructors, first of all, identify the major learning outcomes desired for a course and then determine if students will benefit sufficiently from the time spent in traveling to the field, collecting data, and conducting analyses. If a major objective of a course is to have students master a body of content that has already been clearly defined by the instructor or a textbook, then field methods may not be appropriate. If, however, major goals for a course include having students compare and contrast information from different sources or learn to analyze, synthesize and categorize, then instructors might be encouraged to consider ways that field methods could be incorporated into their classrooms. It is also important to have instructors consider the benefits that can be derived from the use of field methods in terms of increased student interest and motivation, content relevance, and development of critical thinking skills.

Course Content

Although field methods can be useful for contributing content that can enrich a course and make it more interesting for students, such methods probably cannot provide the only source of information for an undergraduate course. If students are to learn to think as researchers who gather data to answer their questions and solve their problems, they must also learn to interpret that data in terms of previous information, especially research and theory, that has focused on the phenomena of interest. Meyers (1986) points out that, especially for critical thinking to take place, "a teacher must present some explicit perspective or framework for disciplinary analysis – a structure for making sense of the materials, issues, and methodologies of the discipline being taught" (p. 6). This kind of content must be presented, then, either through the textbook or through the information that the instructor provides for the course.

Other Instructional Strategies

Although field methods can accomplish a variety of instructional objectives, they cannot, by themselves, provide the only tools for mastering course content. They will probably have to be integrated with reading assignments, lectures, and interactive modes such as teacher-led and small-group discussion. Particularly when such methods are being used to accomplish critical thinking objectives, they require that students have ample opportunity to summarize, test, express and support their conclusions. Thus, most often, such methods also have to be complemented with oral and written interactive modes.

Logistics

The biggest logistical problem in using field methods as a way of helping students learn is one of matching students with appropriate field settings. Depending on the level of a college group, an instructor may be able to make the assignments and let students decide on their own about issues of entry and access. However, if students need assistance finding and arranging to visit appropriate field sites, the process can be challenging, particularly if the instructor is new to the area or teaching the course for the first time. Additionally, once students have been matched with appropriate settings, they still need information on policies and guidelines for obtaining permission to conduct studies in particular field settings. Traveling to and from a field site, observing, and interviewing also take time. Consequently, instructors should be cautioned to balance the amount of class time they require of students with the perceived value of the exercise. They may even want to structure their course so that students are given some portion of the regularly scheduled class time each week to work in the field as students were in the case study.

Methodology

Many undergraduates will not have been exposed to field methods. Even though some students may have conducted interviews or more formal observations, most students will not have treated such methods as systematic ways of collecting and analyzing data and reaching conclusions. Therefore, instructors will want to schedule time at the beginning of the course or before a specific exercise to talk very basically to the students about such topics as determining a research question, gaining access to the field as a participant or nonparticipant observer, taking field notes during interviews and observations, collecting documents, moving from field notes to tentative hypotheses, analyzing the data, and reporting the results of their work. As they prepare students, however, instructors may also want to enlist the services of a guest speaker, perhaps someone else in the department, who specializes in such methodology. At the end of this article is a list of additional sources that describe approaches to field methods.

Regardless of who provides the background about the use of field methods, for undergraduates, it must be presented at the most basic and concrete levels. Since it does take time to prepare students and get them organized for the logistics of field study, instructors should be encouraged to consider carefully whether they want to use field methods as an instructional tool for one or two projects during their courses or as an ongoing learning process throughout the term. Typically, undergraduate competence in research methodology need not match that of graduate student levels, since the aim is to provide an active learning process – not to publish a research report. Students do need, however, the basic tools that will permit them to gather their data systematically and analyze it to the extent that they can discuss with the instructor and other students those representations of data that appear to contradict theory or expected outcomes.

Student Roles

For the most part, students will have had very little experience in the researcher role. Furthermore, they may typically come to a class expecting the instructor to be the major source of information for the subject. Consequently, instructors will need to spend time discussing with students not only the appropriate protocol for getting into and working in the field as researchers, but also developing ideas and contributing to class as a result of their research. Students may need to understand that a major part of the content for a particular assignment or course is based on the data they generate in the field and that much of the comparison, contrast, and discussion in the class will rely on tentative hypotheses and conclusions that they generate from their analyses of field notes.

Teacher Role

When instructors use field methods as an instructional method, they should be prepared to assume a variety of roles, including content expert, field methods practitioner, individual consultant, and facilitator. As content expert, the instructor will be responsible for providing the content to which students may compare and contrast the data they generate in the field. In the role of field methods practitioner, instructors may have to assist students in deciding how to obtain data in a particular context or how to categorize and synthesize their data as a class. Instructors may assume a consultant role as they work with individual students who have particular problems analyzing their data or who have generated particularly interesting or puzzling insights about the phenomenon being studied. Finally, as facilitators, instructors will have to provide ongoing summary, analysis and synthesis to help the students tie the information generated in the field to the important instructional objectives of the course.

Summary

Although the use of field methods as an instructional tool may require major rethinking and restructuring of the traditional ways that some courses have been taught, the value of such methods cannot be disputed. Field methods provide one of the few instructional tools that can help faculty achieve their specific course goals as well as involve students, increase their interest, get them to think critically, and make sure their learning is relevant to what actually happens in the real world. As faculty developers we can play important roles not only in helping faculty recognize the possibilities of such methods, but also in helping them address the special considerations for incorporating such methods in their teaching.

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Topics in Question: Active Learning through Inquiry

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> "Children enter schools as question marks and leave as periods." (Postman and Weingartner 1969)

> "It is a tragic fact that most of us only know how to be taught; we haven't yet learned how to learn. [Given that the half-life of facts may be ten years or less these days], the real aim of education should be to develop skills of inquiry." (Knowles 1975)

These two statements arrest my attention, but it is the landscape between them that I want to explore. Why are so many students poor questioners – why do they lack habits and skills in so fundamental a human activity as inquiry? And why, if it is true that the best teaching capitalizes on students' natural curiosity, do so many students appear to lack the very gift we wish to tap?

Let me begin my investigation with a scenario. A typical assignment in my English composition course is what I call an "issue paper," which asks students to research and evaluate some issue that is personally important to them. I advise the students to begin their exploration with a question or series of questions about the issue, and to write the question(s) at the top of a sheet before researching – the question to serve as both a guide and as a reminder of the need to keep an objective view as they investigate. But when research time rolls around, what do I too often get? "Topic: Acid Rain" or "Topic as question: The causes of acid rain."

From *To Improve the Academy: Resources for Student, Faculty, and Institutional Development*, Vol. 7. Edited by J. Kurfiss, L. Hilsen, S. Kahn, M.D. Sorcinelli, and R. Tiberius. POD/New Forums Press, 1988.

Even when this topic is, in fact, stated as a question ("What are the causes of acid rain?"), I know the student is not likely to get very far: the "question" as posed leads too readily to fixed answers and hence to quick closure. What is the problem here? Is the task I have set too difficult? Is it the "topic" alone that fails to engage the student in a meaningful pursuit? Or does the problem lie in students' tendencies (far too prevalent) to seek ready-made "book answers," to parrot researched information and, hence, to limit themselves to mechanical exercises in shuffling research without analyzing, synthesizing or evaluating it? The problem lies in all three areas, I think – and more.

In my experience, a majority of freshman students do tend to grasp for readymade topics, topics that leave little room for personal engagement. These topics, then, remain just that – mere topics – until students recognize ways in which they represent real, personally compelling issues. Is this requirement – active engagement – too "hard"? Perhaps, especially if it is foreign to the students' experience and understanding of what is expected in meaningful writing and research. The result? Often, instead of analytical papers, students generate reports, book searches, "xerox and shuffle" affairs done with no real sense of inquiry, and little, if any, true analysis or interpretation. Even in persuasive writing, students tend to rush after a fixed point of view, and to conceive of "research" as an effort to locate articles that will support that view. This apparent discomfort with "looking into" matters seems to me to represent a major impediment to learning. The students' activity is mechanical; there is no sense of pursuit, of investigation, of inquiry, of discovery and of capture.

Why is it so difficult for students (or anyone, for that matter)to ask questions, and, hence, truly to engage in acts of inquiry and fruitful investigation? Richard A. Wertime (1986, p. 2) gets to the heart of the problem when he tells us that, for many people, asking a question is tantamount to admitting a deficiency. It is, he reasons, an act of "self-demotion." Many people cannot or will not readily tolerate such self exposure; it is simply too painful. Many people lack the self-confidence necessary to take the risk of exposing their deficiencies. And, obviously, it takes a certain degree of knowledge before we even know whether or not the questions we risk asking are, in fact, "good questions." Wertime echoes a variety of researchers who suggest that asking questions is indeed difficult, and often tenaciously avoided, because it involves a fear of being judged. This fear, it seems, represents the primary psychological constraint for teachers who wish to develop skills in questioning and inquiry. And, as I will show later, it is precisely this natural fear that many traditional classroom questioning methods tend to intensify.

There are other constraints that loom just as large. Some of the toughest to address are developmental in nature. Many students come to us at that stage of cognitive and emotional growth characterized by clinging to rules, to polarized views of right and wrong. It is not surprising, then, that students at these stages of development typically clutch after what Wertime calls "the safety of received ideas" (p. 2). To complicate matters, studies by Lawton (1963) show that family patterns and cultural factors can also affect one's personal scheme, and thus one's attitudes towards questioning. When students have not experienced much open discussion or debate as a part of family life, they are not typically reflective or intensely interested in ideas. Tangential to these conceptual and cultural constraints are the feelings of taboo often associated with questioning conventional ideas, "accepted facts," or (worse) one's own beliefs—open and existential questions that involve risks above and beyond cultural pressures.

In addition to psychological, developmental, and socio-cultural constraints—the ones we feel least able to address or control—are the constraints we can, perhaps, do something about. These are pedagogical in nature. The quote from Postman and Weingartner at the head of this article asks us to pause and consider what our students have been conditioned to expect, and how their primary and secondary educational experiences correlate with college faculty expectations. Most researchers tend to concur that the typical high school graduate has become "rule bound"; emphasis on rote learning and lecture formats(despite their obvious value) has tended to promote passiveness and closure—to dull curiosity and drive. In fact, a variety of studies examined suggest that the bulk of questioning done at grade and high school levels aims primarily at "checking" for recall of detail; the chief purpose is not so much to promote thinking, as to test for memory and "correctness." Don Nix of IBM's Watson Research Center concludes that "such questioning may teach the student that comprehension consists of mere recall of specific facts from a text.... This response type can not be expected to lead to effective inferential comprehension" (1985, p. 298). Indeed, teacher-generated questioning of the sort Nix refers to can block discovery and inhibit cognitive growth.

The situation is complicated, as Bean (1985) suggests, because while many teachers believe that they encourage inquiry and divergent thinking, they are, in fact, after answers and not exploration. As a result, what passes as "discussion" too often turns out to be little more than a "calling on" procedure. Bean concludes that even though teachers expect and tend to reward divergent thinking, their actual methods too often encourage quite the opposite: early closure.

Finally, David Bartholomae (1983) contends that many students come to us with little skill in inquiry or exploration because our educational system has become product bound. The heavy emphasis on the sissupport essays, for example, leads students to close a subject down, rather than open it up to explore its possibilities. This pattern is precisely what concerns me, for it narrows our students' conception of what education is all about. As Zeiger concludes, "we are implicitly teaching that the ability to support an assertion is more important than the ability to examine an issue. In doing so, we fail in our duties as liberal educators" (1985, p. 458).

Confronted with such a tangle of problems and constraints, what can be done? Two solutions come immediately to mind. The first is to understand that part of our duties as liberal educators is to create an atmosphere in which students can take risks, learn to pose questions, and discover some measure of personal and cultural relevance in the knowledge they are asked to master. The second (and perhaps easier) solution is for teachers to give direct instruction in strategies of inquiry, and to make those strategies explicit in all reading, discussion, and writing assignments. In addition, it is important to include questioning patterns that attend to differences in students' developmental levels (i.e., concrete operational or dualistic thinkers). Too often, students perceive of our objectives and strategies as part of a "hidden agenda"; we should take time to clearly and fully explain what our methods of inquiry will be, what our expectations are, and why. In the end, our ability to recapture students' curiosity and engagement depends, to a considerable degree, on our ability to empower students with the thinking skills and strategies that drive learning in our particular domains. We confront three interrelated tasks: improving motivation and engagement, teaching inquiry skills, and addressing students' different developmental levels.

Let me return now to my initial scenario. What line of questioning, and what kinds of informal, nonthreatening prewriting exercises might help to more meaningfully engage the student who has dead-ended with the topic of acid rain? Initially, I can think of no more useful strategy than journalism's 5Ws: who, what, when, where, why/how are the questions I ask my composition students to look for in their reading, and to pursue in their writing. I can think of no discipline or academic task that would not in some way lend itself to preliminary investigation based on this strategy (with the possible exception of mathematics). The strategy is simple, widely used, and not easily forgotten. And, since the first four questions are fact-based and concrete in nature, they provide students at any developmental level with a basis from which to begin moving into complex issues. Moreover, I like to use the journalists' line of inquiry to introduce students to the kind of real-life, active pursuit that makes news and editorial writing seem so much more purposeful and active than much of academic writing tends to be. In fact, when students begin to investigate personal and local ramifications of an issue, and when they conceive of writing as a pursuit of questions that are both personally and socially relevant (guided by the curiosity of their teachers and peers), they can, for example, begin to work their way into longer papers by writing editorials for school or local newspapers. This intermediate assignment gives students a livelier sense of purpose and audience than they might initially have in response to a research assignment, and the prospect of actually appearing in print (as several of my students have) adds immeasurably to motivation.

Briefly summed, then, the bulk of my students' assignments take them through the following series of activities, all driven by the 5Ws: gathering information, interviewing appropriate people for added professional insight or public opinion, journal writing and group discussion to develop a sense of angle and lead, and then writing documented editorials. This emphasis on "real" investigation and "real" writing tends to move students toward the research paper with a greater sense of involvement and purpose, and with a more genuine sense of voice than the typical rigid and formulaic conception of academic writing permits. Let's see how this system might work. In her journal, the student with the topic of acid rain is coached to ask and respond: what is acid rain? where is it prevalent? when did it become a problem? who is affected? how is it produced and how can it be controlled? After this preliminary and private journal writing, she can begin to pursue questions of personal or local relevance during small-group coaching sessions aimed at discovering what others might find interesting in the student's topic. Hence, curiosity is created in the group setting, at the same time the student gains increased perspective from peer questions. Group discussion also helps to move students from their initially limited views of factual information toward more purposeful and meaningful lines of inquiry.

Returning to her journal, our student's thinking begins opening to more fruitful possibilities (still using the 5W strategy): how is the ordinary citizen affected by acid rain (I know how farmers and fishermen are affected, but how am I personally affected)? Where in my immediate environment is acid rain a threat? Who is trying to control this kind of pollution? How successful have clean-up attempts been? We can see now how these preliminary questions help students move into questions of personal relevance, but at the same time, they begin to tackle more open-ended questions involving higher order thinking skills(i.e. the "how," the "why," and the "what if" of an issue). Thus, the student's pursuit might continue to move something like this: will my health be jeopardized, or the health of prospective children? If I plan a career in agriculture, home economics, health care, or tourism,how will my future be affected? If I plan a career in business, might I need to respond to legislation aimed at reducing acid rain pollution? Does the ordinary citizen really know the facts on the nature of the hazards posed by acid rain in our country/state/area? Students who are encouraged to ask questions of personal relevance are much better able to engage in the learning process; they more readily find real topics to pursue; and they find their investigations more compelling and rewarding than students who grope their way around global issues or confine themselves to standard arguments often based on isolated studies or limited examples.

Moreover, this simple 5W strategy not only invites questions leading to personal engagement, it also incorporates a progression of higher order thinking tasks similar to those outlined by Benjamin Bloom in the mid-50's. Bloom's taxonomy dovetails nicely with theories of cognitive development described by Perry and Piaget. Bloom's taxonomy suggests a hierarchy of questions ranging in complexity from concrete questions of knowledge and understanding, through more complex operations involving application, analysis, synthesis, and finally evaluation (Bloom, Engelhart, Frost, Hill, & Krathwohl, 1956). Students at a concrete operational level of cognition can best respond to tasks involving questions of recall and comprehension; tasks involving application are more approachable when information has been mastered at the comprehension level. In other words, it is fruitless to ask students to leap at once into analysis or evaluation (the how,why, and what if). We must help them build up to complex assignments by structuring preliminary exercises and discussions around more concrete questions.

Consistent use of strategies such as the 5Ws can help students form efficient habits of mind that will enable them to progress from basic/concrete to abstract/higher order cognitive operations. For example, "who, what, when, where" are questions of knowledge and comprehension that must precede more complex questions of application (if acid rain spreads pollutants via wind currents, how can I detect acid rain pollution in my immediate environment, and what can I do to reduce this pollution, etc). At the same time, though, factual material needs to be explored through questions of personal relevance; and private questioning must eventually "go public" (through group discussion and interviewing) before most students can credibly support a stand on an issue (analysis/synthesis), propose a solution (application), or begin an evaluation of proposed legislation or an assessment of public awareness.

Finally, no learning strategy can be truly beneficial unless students have constant practice in non-threatening situations. For over 25 years, researchers in the fields of rhetoric and composition theory have advocated the use of journals to provide such practice, encouraging private and personal writing to promote cognitive growth. Most notably, Emig (1977), Baker (1983), and Fulwiler (1983) have shown that journals offer students the privacy to err, and promote what I'm sure we all want more of: the willingness to play with ideas and to risk the questions that often lead from ignorance to breakthrough thinking. By assigning a substantial number of points (but no letter grade) to journals, and by giving them a central role in routine class procedures, teachers can encourage students to discover what powerful learning tools writing and questioning really are. Moreover, consistent use of journals gives students the experience with prewriting and even with "failure" that are a necessary bridge to higher order cognition. Such a method gives students an optimal chance to discover the lines of inquiry they can honestly engage in and can reasonably succeed in handling.

I am greatly indebted to my colleague, Lesley Ann Rex, of the University of California-Santa Barbara, for the idea of using question-based journals to spur both individual and class discussion. Her experience with what she calls the "Question Journal," like mine using a similar approach, has shown that when teacher and students regularly share their questions, curiosity about other people's questions and pursuits becomes quite infectious. As students begin to concentrate less on "answers," a potentially high-anxiety atmosphere can be transformed into one that encourages the individual voice with its unique and urgent questions. Moreover, students soon discover that the best questions are not fully answerable, and in this way they begin stretching toward an understanding that truth is many-faceted and solutions to our pressing issues come in differing, often conflicting, possibilities. It is the habit of actively questioning and pursuing these possibilities that opens the intellect and empowers students; only by fostering inquiry can we promote the kind of life-long learning skills that liberal educators see as their highest goal.

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PART III ACADEMIC LIFE: REALITIES AND POSSIBILITIES

The first two articles in this section report results of intensive interview studies with dozens of faculty. Hageseth and Atkins note connections between the institutional context and the quality of faculty life. Sorcinelli documents the joys and frustrations of new faculty, and describes programs at her institution to support faculty during their first few years on campus.

Studies of academic life reveal numerous stresses associated with the "eternal triangle" of teaching, research, and personal life. Boice's study examines the widely held view that faculty do not have time to write on the job. He reports a study comparing the work patterns of two groups of faculty experiencing new pressures for scholarly publication: traditional faculty on campuses where such pressures are increasing, and library faculty. Although scholarly activity is a pervasive aspect of faculty life, reviewers found this article troubling, perhaps because POD has not traditionally addressed the importance of scholarship in faculty development work. Boice's work challenges us to expand the boundaries of our professional role definition to include this central and often difficult area of faculty life. It also suggests a window of opportunity for renewing professional vitality of faculty.

Thompson, Turner, and Boice take a hard look at what we know about academic life, and offer some "insider's advice" to new faculty. While not everyone will agree with their assessment of the situation, their suggestions offer a good starting point for discussion about new faculty survival on any given campus.

Finally, we offer a description and analysis of one of the most remarkable faculty development programs in the country. The Washington Center, housed at The Evergreen State College in Washington State, facilitates faculty exchanges for a specific purpose: collaborative teaching. The program builds statewide community among teachers, and unleashes energy enough to revitalize teaching in enduring ways.

Taken together, these articles provide ample food for thought and discussion about the quality of academic life and what might be done to enhance it.

Assessing Faculty Quality of Life

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The challenges faced by colleges and universities today require professors dedicated to excelling as teachers, scholars, and mentors. Ironically, such individuals soon may become an endangered species. Since it is the faculty who carry out the essential work of the institution and who most directly affect the lives of students (Kamber, 1984), assessing faculty quality of life becomes a key issue for faculty developers and other university leaders.

In recent years numerous researchers have noted the declining morale of college and university professors. Balancing the multiple roles of personal and professional life is a complex and stressful task (Sorcinelli and Gregory, 1987). Decreasing mobility, financial constraints, increasingly stringent requirements for promotion and tenure, erosion of academic governance, and the pressures of teaching and keeping professionally current are having both a direct and an indirect impact on faculty morale, satisfaction, and self-esteem (Bowen and Schuster, 1985; Clarke, 1985; Jacobson, 1984). The morale problem is often acute for professors experiencing mid-life burnout (Boice, 1986). New faculty as well are experiencing significant job related stress and dissatisfaction (Turner and Boice, 1987). Bowen and Schuster (1986) suggest that the loss of status of the profession, the decline of compensation, and erosion of the work environment are bringing the academic profession to a critical juncture.

Keeping faculty members productive and vital calls for broad faculty development efforts (Gaff, 1976). The recruitment and retention of

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quality faculty will become more difficult in the future unless universities are successful at improving the work environment in order to reaffirm the traditional values of an academic community—scholarship, autonomy, participation, collegiality, reliable tenure, and breadth of learning.

The impetus for this study came from the researchers' awareness, from their clinical experiences with many faculty members, of the significance of faculty concerns and the direct impact of faculty well-being on student well-being. Since the information gained from clinical experience was confidential, the researchers sought to obtain information in a systematic way in order to address major issues of institutional mental health.

The purpose of this study was to assess the "quality of life" experienced by faculty at a state university with a stated teaching mission and an enrollment of approximately 10,000 students. A second purpose was to demonstrate a methodology for identifying faculty concerns through a series of personal interviews. The overriding value which influenced this study was that in an academic institution the development of its human resources should be a major purpose and an integral part of its processes (Cares and Blackburn, 1978).

Support for the project was provided by the university administration. In particular, the Vice-Chancellor for Academic Affairs offered encouragement by his excitement about the project, his openness to hear sometimes difficult feedback, and his deep caring for all persons within the university community. The Faculty Development and Instructional Services Center also contributed important support for the project in disseminating the report and in implementing a number of the recommendations.

Method

A 10% stratified random sample of 52 faculty members was drawn from a list of full-time, tenure track teaching faculty, supplied by the University's Office of Institutional Research. At least one faculty member from every teaching department was included. Of the original sample, three subjects declined to participate and were replaced with other random selections. The sample reflected the demographic parameters of the faculty population: the mean age was 45 years, the average number of years in the profession was 16, and 17 percent of the sample were women. The sample included 24 full professors, who averaged seven years at rank, 17 associate professors with an average of four years at rank, and 11 assistant professors who averaged four years at the rank of assistant professor.

With the assistance of several campus consultants, the researchers developed a one-hour structured interview procedure for this project (the questionnaire form is available from the authors.) The format was similar to Spradley's (1979) anthropological research method and Denzin's (1970) sociological interview design.

A model for the interview process was adapted from a research technique developed by Laslett and Rapport (1975). This technique, known as "collaborative interviewing and interactive research," has been used primarily in the study of family dynamics. For studying faculty, several features of this method were particularly useful. The use of two interviewers and the awareness of the interview itself as a process similar to a clinical situation enabled the researchers to explore the personal meaning of responses, to attend to nonverbal and verbal cues, and to create an atmosphere of empathy and respect. Another essential feature was the use of the instrument as a guide for thorough and systematic collection of all data relative to the topics studied. The interviewers sought to go beyond mere descriptions of events and opinions to understand respondents' meanings in relation to the topics.

All of the interviews were conducted during the Spring and Summer Semesters by the researchers, two staff psychologists at the University's Counseling and Psychological Services Center. Verbatim responses were hand-recorded by the interviewers during the session. The identity of the subjects and their individual comments were kept confidential.

Results and Discussion

The information gathered from the faculty interviews was broad, diverse, and richly personal. This information was coded, compiled, and tabulated question by question (frequency tables and categories of responses by question are available from the authors.) Both the frequency of specific responses and the emergence of general themes within questions were considered valuable data. Most interesting, however, were the several broad themes which emerged across questions. The type of question, the context of the response, and the clinical impressions of the two interviewers helped determine which themes seemed most important. The major themes identified by the interviewers related to the following: 1) confusion about the institutional mission, 2) the paradoxical nature of teaching, 3) faculty needs for reward, autonomy, and creativity, 4) problems of academic leadership, 5) departmental concerns, 6) human development concerns – family transitions, midlife challenges, career and personal development.

Institutional Mission

An important question which emerged for faculty was how an individual's own personal and professional goals fit within the overall mission of the university. Freedman, Brown, Ralph, Shukraft, Bloom, and Sanford (1979) have pointed out the unease, confusion, and lack of professional identity among faculty. The results of the present study suggested that there is a dynamic interaction between the faculty member's career goals and the university mission. Confusion in one led to confusion in the other. Confusion in both areas, e.g. a mission statement implemented with mixed messages and a faculty member experiencing midlife career dissatisfaction, often produced the unease and lack of professional identity highlighted by Freedman, et al. (1979).

A central aspect of this issue was the question of scholarship. Definitions of scholarship, a deeply held commitment for most faculty, differed appropriately among the basic sciences, the humanities, the arts, and professional fields. Such diversity is basic to an academic community. Ways of involving students in the pursuit of knowledge and meaning varied appropriately from discipline to discipline, and from teacher to teacher. Within this diversity territorial attitudes were present – the idea that one's definition of scholarship is the only right one, that the standards for one's department or college should apply to everyone else, or that the research methods of one's discipline provided the only source of truth. Faculty members rarely described the disciplines as complementary arenas of scholarship, functioning within a larger common purpose.

Many faculty members expressed a sense of powerlessness regarding questions of mission. When the several layers of administrators above them had differing views, some professors felt threatened and vulnerable, and many withdrew into the role of critic. Several referred to "the Dean's mission vs. the Vice-chancellor's mission" and questioned whose expectations would affect their own tenure, promotion, and merit decisions. Some individuals and departments gave up trying to articulate what they stood for in favor of conformity to perceived administrative agendas, losing sight of the fact that it is the faculty themselves who ultimately define the mission of the university.

The Paradox of Teaching

Closely related to issues surrounding the university's mission was the role of teaching in academic life. Teaching afforded both rich rewards and bitter disappointments to faculty members. Most said that teaching was the first priority of their work, yet they also acknowledged that good teaching generally was not rewarded by the system. When asked to share their best experience working at the university, faculty members most often mentioned classroom experiences and student relationships.

This finding seemed closely related to experiences at other institutions. As Paul Strohm notes, for example,

> We need not look far to find manipulative and self-interested encounters, outside the university and sometimes within. But the relation of teacher and student offers an occasional glimpse of another kind of encounter, to which each person brings his or her best self. A profession which fosters such encounters is worthy of sacrifice and hope (Strohm, 1985, p. 126).

The excitement of shared participation in learning, seeing students progress and expand, and having students respond with interest and enthusiasm provided faculty interviewees with some of their most meaningful rewards. They especially valued teaching a small group of highly motivated students. Honors classes, special topics courses, seminars, interdisciplinary programs, and team teaching were reported as examples of exciting and stimulating teaching challenges. Knowing that their teaching efforts made a difference mattered a great deal to most professors.

Some of the worst experiences also had to do with teaching. Many faculty members were concerned about the declining abilities of students. Others pointed to differences in values which they found disturbing. The present passivity of students and their motivation for jobs and financial security instead of an "education" confused and frustrated many professors. To those who hold to the nobility of teaching, to the important work of passing on the culture, it was difficult to have students who wanted only to get through a course. For numerous faculty members the notion of "retention," so popular with administrators, represented a commitment by the university to "coddle students" and to discredit the integrity of the teaching process.

Other researchers have suggested that of the three major faculty functions – teaching, research, and service – *teaching*, because of its multiple roles and time-consuming demands, is the most stressful (Gmelch, Lovrich, and Wilke, 1984). Some professors in this study were experiencing burnout or were concerned about it. As one put it, "I get psyched up for classes. I'm worried I'll someday lose the excitement." Helping professors maintain their excitement in teaching is a basic goal for universities which are genuinely committed to student learning.

Faculty Needs

With regard to work, professors most often expressed the need to feel valuable and valued. The knowledge that they were doing meaningful work was extremely important. Whether it be delivering a good lecture, serving as a mentor, doing research, or participating in faculty governance, most did indeed feel that what they were about was important, and they tried to do it well. Many felt that the external reward system did not reflect individual effort. As one professor put it, "The reward structure for a do-nothing professor is not that different from a do-something professor." A feeling of achievement and accomplishment was critical. To have the recognition and respect of colleagues was a prime source of feeling valued. When differences in priorities and professional interests became personal clashes, this need often remained unfulfilled. For some faculty the foremost acknowledgment of accomplishment came from colleagues within the field, but outside the university. Faculty members also sought recognition and respect from administrators. It was desired at all levels but essential from the chairperson. Whatever the personal style of the chair, it was incumbent that she or he find ways to let faculty know that their contributions were valued. Genuine appreciation was often more valuable than intermittent merit pay.

Professors in this study expressed a strong need for autonomy. Faculty members tended to see themselves as individual professionals, entering into contract with the university, not as "company" men and women. Most entered academics, at least in part, to have the freedom to pursue their own professional interests. Professors prized having the time and opportunity to read, to think, to do research, and to write and speak openly about issues and problems of their choosing. The freedom and encouragement to create, to develop new ideas, to engage in dialogue and debate were very important. Such freedoms are the hallmark of a university (Anderson, 1965), and they must be protected from administrative intrusion and financial constraint.

Many responses in the survey pointed to the need for faculty to have special opportunities for creativity, for learning new skills, for doing something different, and especially for participating in projects which cross lines of department and discipline. Professors frequently mentioned examples such as faculty development projects, interdisciplinary team teaching, off-campus assignments, new projects of various sorts, and released time for research or other activities. These experiences were important both for personal satisfaction and for continued professional growth. For specialists, sometimes trained in areas of narrow focus, such activities were paramount for a broader understanding of the university and each other.

Academic Leadership

Hierarchical structures are characteristic of higher education administration. The results of this study confirmed that as levels were added to the administrative structure, faculty tended to feel more burdened and hindered than facilitated by the administration. Moreover, each level added to the probability that communication would be unclear and that mistrust would increase. An administrator's very choice of the role itself, of management over scholarly pursuits, made his or her power motives and ego needs suspect to many professors. As one faculty member noted, "There is a great temptation here for good teachers to go into administration for power and money." Given leaders with integrity and effective communication, these suspicions lessened. In the absence of strong, honest, and visionary leadership, they festered into a generalized paranoia. As Nevitt Sanford points out in his seminal work on academic culture:

> But all this knowledge and expertise and humanity will not come to much, indeed it may not even find expression, unless faculty and students trust one another and all have some degree of trust in the administration. Paranoia is the social disease to which institutions of higher learning are particularly prone (1980, p. 207).

Administrators, for many faculty, were an unknown, a screen upon which they cast their own greatest hopes and worst fears. The greatest need was clearly for more professional, personal, and genuinely human contact.

The role of the departmental chairperson emerged as perhaps the single most important administrative position in the university, and the difficulty of the role was evident. Professors saw chairs as part faculty and part administrator, often perceived by each group as a member of the other. Those who were well-respected by the faculty were thought to possess an incredible mix of organizational and interpersonal skills combined with leadership ability, fair-mindedness, and meticulous attention to detail. To many faculty members it was the chair's interpersonal skills (or lack thereof) that they felt the most. As one professor put it, "The chair of the department sets the tone, and that's what you live with." Given the faculty's need for feeling valued and appreciated, those chairs who did offer genuine respect and support, who empowered their faculty, were extremely valued. The chair significantly influenced the well-being of departmental faculty members and their perceptions of university issues.

Leadership of faculty is a great challenge. It is clear that effective leadership at all levels involves first, listening well to the many official and unofficial voices of the faculty and second, hearing, beyond concerns that may seem petty, what the deeper issues are. As one professor put it, "I worry about administrators who have no people training. We need more people who can read accurately what they hear." Faculty parking, for instance, may appear to be a trivial concern. In reality parking is a powerful symbol of status and an important clue to understanding faculty morale.

For participants in this study, the primary issue academic leaders needed to address was not how to manage but how to support. It was not how to administer; it was how to evoke the best from each person, to tap the deep commitments of faculty members to do important work and to do it well. The challenge was to prize the rich diversity that university faculty represented and to bring together diverse individuals and groups for the common purpose of educating students.

Departmental Issues

Another theme which emerged in this study was the importance of the department. The department and the issues related to it loomed as major sources of both satisfaction and dissatisfaction in life, in crises and challenges, and in best and worst experiences at the university.

Primary factors in departmental well-being seemed to be the composition of the group and the maturity of its individual members. The effectiveness of the department as a working group reflected the personal development of the members and their ability to communicate with each other in an atmosphere of mutual respect. Many faculty members paid "lip service" to the prizing of diversity, but day to day their individual differences often caused problems. In some departments the "old guard" were distrustful of newcomers or vice versa. In very large departments, factions often fought over issues and resources.

The choice to work in an academic community reflects certain values and some level of intellectual development. Intellectual development, however, does not imply an equal degree of emotional, social, or spiritual maturity. As in families, all aspects of human nature come into play within the department. Helping departments to become more functional groups is a worthy focus of faculty development efforts.

Human Development Issues

Several questions on the survey were aimed at gaining a better perspective on developmental issues confronting the faculty. Questions regarding professional goals and personal growth produced a surprising variety of responses. The responses to these questions emphasized pursuing scholarship, finding more balance in life, giving more priority to personal relationships, and focusing more on the spiritual side of life. The overriding value was involvement in the ongoing process of growth.

Understanding the intensity and diversity of these responses is facilitated by looking at a model of faculty and adult development. According to Nevitt Sanford (1980), the developmental sequence of a college professor proceeds in much the same way as other adults. Consequently, for a faculty with a mean age of 45, the developmental tasks involve self-acceptance, transcending generational boundaries, and enlarging one's capacity for intimacy (Levinson, 1978). Providing opportunities to address these concerns is an important administrative challenge.

It is not surprising that for many faculty the family was the source of the deepest satisfactions and the greatest frustrations in living. For many who have pursued with passion the life of the mind, it is only with the family that the heart is shared. Cool, detached, and logical in a professional symposium, many a professor goes home to let go in anger and love to experience his or her full humanity. At the same time, the security and stability sought from the family is frequently short-lived in contemporary society. The most significant life crises of these faculty came most often from family transitions – children growing up and leaving home, aging parents, family illness and death, and separation and divorce. The challenges which families present required that faculty continue to grow and mature as human beings.

Working out a comfortable balance between work and family life emerged as a high priority, a source of both satisfaction and dissatisfaction, and certainly an ongoing challenge. It was related not only to external pressures and to balancing time, but also to internal pressures to find a personal balance, to find ways of meeting spiritual and emotional as well as intellectual needs.

Recommendations

The stories of the 52 individuals interviewed in this project give us some meaningful information about the quality of life of the faculty and the academic climate of the university. They tell us especially about human beings who are diverse, but share a deep commitment to their work and a sense of its importance. Among these faculty members there is overall a strong sense of responsibility and a high level of professionalism despite their dissatisfactions, frustrations, and disappointments.

Several possible directions emerge from this research. Although these 52 faculty members are from one university, their experiences are common to many campuses (e.g. Jacobson, 1985). To the extent that other institutions' issues overlap with the present findings, the following recommendations may help identify starting points for discussion and policy development by faculty and administration.

1. Work towards a consensus about the university's mission, synthesizing the "felt" mission of the faculty and the "stated" mission articulated by the administration.
2. Identify the formal and informal processes by which faculty receive rewards and recognition, searching for and resolving inconsistencies in tenure, promotion, merit pay, convenience of teaching schedules, and committee assignments.
3. Address the issue of academic leadership and the "distance" between faculty and administration by opening lines of communication, inviting direct and mutual feedback, and studying the pivotal role of the department chairperson.
4. Broaden the concept of faculty development beyond instructional and/or remedial services to include opportunities and practices which support the personal growth and career renewal of faculty.
5. Focus on organizational and personal well-being with the emphasis on self and institutional awareness and the interpersonal dynamics within the university community.

Conclusion

Beyond the results of the study, a word must be said about the time-consuming process of collecting data by conducting interviews with individual faculty members. The researchers chose this procedure over more traditional methods with the belief that each participant would be a more willing and enthusiastic research subject. What happened as a consequence became in many ways the most significant aspect of the study. Some faculty members felt honored to be interviewed; others described the process as uplifting, and still others reported a feeling of relief and catharsis. For the interviewers, it was an experience of discovering the humanity of the professoriate, the real, fragile, and human essence often hidden by the intellectual and lofty image of academe. What started out as a plan to collect data in a unique and personalized fashion transformed into individual faculty development projects. The act of listening, questioning, and sharing key ingredients of faculty development did in a small but significant way empower each person who was interviewed.

The results of this research project were disseminated and discussed in a number of forums, including the Administrative Cabinet, the Council of Chairs, the Committee on Institutional Studies and Planning, the Faculty Development and Instructional Services Center, and several special interest groups. A number of faculty development efforts were a direct result of this report. These have included faculty breakfast meetings with the Vice-Chancellor for Academic Affairs, programs for Chairpersons, an ongoing faculty committee which voices faculty quality of life concerns, and an expansion of projects related to faculty personal and career development.

The human issues and concerns which have been raised in this study do not lend themselves to easy answers. Some are the issues of human beings living in this culture at this time. Some are concerns related to the very meaning and purpose of higher education. Some are focused on the specific academic community of Appalachian State University. The purpose of this study has been to generate discussion, to raise further questions, and to stimulate thinking about the quality of life of all the members of this community. The fact that such a study would take place at all attests to a recognition of the importance of people as individual human beings, in the life of the organization.

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Satisfactions and Concerns of New University Teachers

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The potential for both rewards and pressures is great during the initial years in academe. In the first years of an academic appointment, new faculty members must unravel the organizational structures and values, the expectations for performance and advancement, and the history and traditions of their new campus setting (Baldwin, 1979; Mathis, 1979). At the same time, they must learn to balance complex and sometimes conflicting roles and responsibilities (Sorcinelli & Gregory, 1987; Sorcinelli & Near, in press). The ability of new faculty to navigate these early years is critical to their success in and satisfaction with an academic career. And the willingness of faculty developers to learn about these early years, and to provide support to new faculty, may be critical to the future success and viability of our programs.

In recent years there has been an increasing interest in the careers of new faculty. Several faculty development studies and reports have provided insights into the experiences of newcomers. Fink (1984) interviewed first year teachers and found that they felt inadequately supported by colleagues and were given heavy first-year teaching loads. Turner and Boice (1987) interviewed all newly hired faculty at a large state university and reported significant job-related stress over collegiality, student evaluations of teaching, and lack of progress in research. Finally, Jarvis (1987), in reviewing a wide range of faculty development programs, suggested that administrators pay more attention to developing junior faculty. He recommended that administrators re-examine reward structures,

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and that junior faculty development programs emphasize research support, curriculum development, rewards for teaching, lighter teaching loads, and improved collegiality.

Like other faculty development professionals, we had begun to raise the question of how faculty experienced their initial years in our particular setting. In 1983, we interviewed a cross-section of faculty at our large research-oriented state university. The purpose was to find out how the academic careers of our faculty were shaped and to determine their concerns, needs, and sources of satisfaction. Based on the results, the office initiated a series of programs, competitions, and publications (Sorcinelli, 1985; Sorcinelli, 1986). But because we chose to interview a sample that approximated the full-time faculty population, the bulk of respondents were at associate (30%) and full (49%) rank. In reviewing what we had learned, we felt a need to more closely study and identify ways to improve the experience of junior faculty. In 1986 we initiated a long-term study of one cohort of new faculty.

Some of the key questions the study sought to answer were: What are the satisfactions and concerns of new faculty? What factors contribute to new faculty satisfaction? Do these factors change over time? How do new faculty learn the skills and find the support they need to balance multiple responsibilities and manage their careers? What can the institution do to enrich the experience of junior faculty?

This paper describes the first phase of this multi-year project. I will review the design of the study, discuss preliminary findings, and describe ongoing programs that respond to new faculty needs. The paper will conclude with an outline of some directions we want to take in the future. It should be acknowledged that these findings cannot be generalized to all college and university settings, although other studies suggest there are similar themes across a variety of academic environments (Boyer, 1987; Bowen & Schuster, 1986; Eble & McKeachie, 1985). My intention is to describe what we've learned in the hope that some of our experiences can be applied to faculty development programs on other campuses.

Design of the Study

In fall semester, 1986, we initiated a long-term study of new faculty, interviewing all faculty hired at the assistant rank in 1985-86. Every individual in the cohort agreed to participate. Among these 54 faculty, 41 were male and 13 female. Interviews were followed by a questionnaire (both instruments are available from author). As an additional source of information, we asked all other untenured faulty (N = 128) to complete the questionnaire. Finally, to understand more fully the needs of new faculty and how they change over time, we set out plans to follow this group of faculty – through interviews and questionnaires – until the tenure decision.

Because of the length and breadth of responses, as well as the long-range nature of the interviews, we have only begun to analyze this rich information. This paper will focus on themes suggested by analysis of the first set of personal interviews.

Findings

This study found that new faculty members at our university were generally enthusiastic about their careers. This finding was particularly gratifying, given the recent appraisals of the American professoriate as demoralized, disillusioned, and dispirited (Bowen & Schuster,1986; Boyer, 1987). New faculty expressed satisfaction with their career choices. They saw their work as providing a sense of accomplishment, autonomy, and opportunity for continued learning. But new faculty were not impervious to stress. Many were under great pressure and worried about workload, collegiality, tenure, making ends meet, and balancing work and personal life.

Sources of Satisfaction

Many new faculty find personal satisfaction in the nature of academic work and the relative freedom with which it is pursued. An assistant professor in the sciences observed:

> I am really enjoying my career. I don't work 80 hours a week because someone holds a whip over me. I do it because it is more fun than any other work I can think of. It's only partially a matter of self-discipline. Self-discipline is when I have a nasty calculation and I have to grind through it. But most of the time it's tearing myself away from the thing I love most, to do the things I have to do like laundry.

New faculty also cited support from colleagues and a positive atmosphere for scholarship and teaching as important. For most, a major attraction of our university was the quality of individual colleagues and the ethos of the department:

> I moved from another university. I'm so happy that I can't imagine going anywhere else. My chair is great. He told me I could teach in the areas I'm interested in and has given me the flexibility to branch out. We have a top researcher in our department and I've learned a lot about

> the research process. You've a better chance for success when you've a senior faculty member to guide you, and I have that now.

More tangible aspects of the work environment also enhanced morale. New faculty credited several campus offices with providing internal funds for research and teaching activities. New investigator awards, grants-in-aid, research and instructional summer fellowships, outstanding young faculty awards, multidisciplinary seminars—all were cited. Moreover, new faculty found several characteristics of a research-oriented university attractive: reasonable course loads, opportunities to work with graduate students, and substantial library and research facilities.

There may be at least one additional explanation for the generally high morale of new faculty. Given a tight academic job market and a relative scarcity of assistant professor positions, many individuals considered themselves fortunate to have landed a job. One said, "I feel lucky as hell that I'm here. I spend more time feeling how fortunate I am to have this job than I do worrying about what's wrong with it. I go to our conventions and meet my cohorts. They are good people and yet conversations revolve around how they are going to find work next fall. I feel embarrassed that I have it so good."

Sources of Stress

The generally high satisfaction is matched by high stress. Over a third of assistant professors hired in 1985-86 came from other colleges or universities. Most already had begun a research program, had teaching experience, and knew something of the realities of an academic job. But more than half arrived fresh from graduate school or a post-doc. This latter group, in particular, described being overwhelmed by the conflicting demands and powerful stresses that are inherent in being an assistant professor. In exploring factors perceived by new faculty as most stressful, the following themes and concerns arise:

Lack of time. "Not enough time to do my work" emerged as one of the most pressing concerns of new faculty who described their semesters as fragmented by too many tasks and too little time to do them. At the start of the second year, many reported that they were still struggling to balance research, teaching, and service responsibilities. A common strategy was to work harder, faster, and longer. New faculty seemed to have a remarkable capacity for sustaining grueling schedules. In some cases, however, individuals described bouts of fatigue, fears of failing at scholarship or teaching, writing blocks, marital tensions, or frequent illness:

> It's very stressful to try to do everything and do it well. I'm always late, putting things and people off. I'm not coping very well and I work every living, breathing moment I'm awake. I used to get by with four hours of sleep and that's what I did all my first year. But I've had strep throat for eight weeks and can't get rid of it. I can't push myself late at night like I used to. The problem is that I could live with less than a perfect job as a student, but not as a professor. I am just beginning to see ways to make things easier.

Research. Research was characterized as a primary interest by over half the new faculty. Generating knowledge provided what one respondent described as "the ultimate expression of your powers as a scholar." Still, over three-fourths of the sample expressed some dissatisfaction with scholarly productivity. Again, the overwhelming problem for most was finding time for research. Many described ambitious plans to write several articles, finish a book, or get a lab up and running by the end of the first year. Instead, they were swamped with the immediate demands of coursework, advising, and administrative tasks.

Some also admitted that, for various reasons, they had not yet set out regular times to write:

> I have a system in mind but I never embark on it. I'm doing two things and can't address either to my satisfaction. I'm revising my dissertation for publication but I no longer want to say the same thing. I have a choice of just rewriting and getting it out or taking time to say something quite good. So, I let day-to-day business intervene so as not to face the decision.

Other factors that increased stress about research included lack of colleagues or graduate students with similar research interests, gaps in knowledge and skills not acquired in graduate training, and pressures to secure outside funding:

> I need to get two or three major grants before tenure. My work is in review; the sitting and waiting is a horrible purgatory. Pessimism permeates everything that has to do with major funding. It puts a pallor over everything. I'm just one step from a rosy future.

Teaching. While new faculty were more likely to rate research as their primary interest, they were strongly committed to excellent teaching:

> My long-term goals are in research that's the way to develop credentials. My short-term obligations are to students. Teaching has to be of a high quality. Lectures need to be well-prepared; tests have to be fair. You need to set aside enough time to help students with problems. There is a certain level of teaching I have to give or I don't feel good.

About half the sample reported stresses in teaching. The major culprit was the time it took to develop courses (several designed four new courses their first year), teach, evaluate, and advise students. Several mentioned that the pressures were accentuated by incongruence between teaching demands and the reward structure. Other sources of stress included too many different preps, course overloads, large classes in poorly equipped classrooms, inadequate academic preparation of students, and inadequate teaching preparation and excessively high expectations on the part of the new instructor. One novice teacher summed it up:

> Adjusting to teaching was my biggest problem. I couldn't believe that teaching would take so much time. And teaching here is so different from my graduate experience. I had small classes of honors students with high motivation. It was a tremendous shock teaching a large introductory course. I had to learn a lot of areas and spend an incredible amount of time getting the content under control. I had to figure out how to present it to students who were there to fulfill a requirement. The biggest morale-breaker was having students who would not even pretend to be intellectually interested or awake. I got lots of feedback from students. One said my lectures were too complex and articulate. Others said I used words that were too big, I talked too fast. I had feedback that I was nervous. Which I was. I would catch myself looking at the door, probably because I felt like running out it. And then, at the end of the first year, I had to teach two new intensive summer courses just to get by financially.

Collegiality. New faculty reported lack of collegial relations as the most surprising and disappointing aspect of their first year. Some expected on-going conversations with colleagues about scholarship, teaching, and other work-related matters. Others hoped for such assistance as reading a manuscript or grant proposal or even visiting a classroom. And while mentoring and support of new faculty did occur in some departments, it was not widespread.

Political divisions within departments were particularly stressful for new faculty. Rather than take sides, most adopted a strategy termed by one respondent as "diplomatic neutrality." In the second year, some faculty were still looking for ways to minimize the distance between themselves and senior faculty. Others, however, had decided to lower their expectations:

> Collegiality is more standoffish than I had anticipated. I know they are busy and we work different hours, but I'm always the one to go to their door. I know the secretaries a lot better than I know the faculty. It took me a while to get used to it but now it's not a problem. A junior faculty member and I compared notes and realized that we have all been

> treated the same so it ceases to bother me. I've accepted that being in this department is a solitary exercise.

Resources. Perhaps most striking in the interviews was the disparity of resources available to young faculty in different disciplines. For example, new faculty in some schools or departments were provided new and fairly spacious offices, personal computers, three paid summers for research, a semester's released time before tenure, adequate clerical staff, photocopying monies, support, and the like. Other new faculty, particularly those in the humanities, worked in run-down buildings with obsolete equipment. Microcomputers, secretarial help, travel allowances, support for released time, or lower teaching loads were curtailed or nonexistent.

Sometimes even such basics as desks and chairs were hard to come by:

> The most irritating problem was trying to set up this office. My position was new and there was no allocation of funds to provide me with an office no desk, chair, file cabinet, bookcase. And I don't blame my department. I know the chairman did everything he could. He had a foreign scholar visit him on one occasion last year and he had to borrow a classroom chair or something for him to sit on. And the scholar muttered a joke that translated to 'the chairman without a chair.'

Administration. Few faculty expressed concern about administration at the campus or university level. The department was the focus and the department chair a critical advocate. In general, new faculty spoke positively about their chairs. Chairs cited as particularly helpful seemed to take time to assign courses which fit interests and priorities, negotiate minimal preps or a reduced load during the first year or two, critique grant proposals, secure internal funds for resources or conferences (grants-in-aid), and provide guidance for annual reviews.

The few chairs who seemed to assign excessive workloads and little decision-making authority to new faculty were a dominant source of stress:

> I have five courses instead of four. Everyone else has tenure so what can I say? There are lots of pressures on me to build up the department and that is stressful. I was manipulated into promising to offer new courses before I could get written feedback on my first year.

Tenure. The pressure to obtain tenure does not yet consume most new faculty. Although it is an ever-present consideration in the work they choose to do, many felt dwelling on something so far in the future was anxiety-producing and unproductive. New faculty have a fairly clear sense of what they have to do to get tenure. Many felt departments, schools, and the campus provided detailed written information, although several pointed to a dissonance between written and unwritten requirements:

> There is the formal and the political understanding. I receive all kinds of things in the mail. If I read them all I wouldn't have time for research. The real, the unwritten requirements are a book or equivalent amount of work and the goodwill of your colleagues. The rest is window dressing.

If anything, early formal evaluation rather than tenure was a stressful event during the first year:

> The more omnipresent event is reappointment. Reappointment is daunting. It's exhausting to spend the first year collecting all sorts of evaluations and to face year after year of rigorous review. I'd recommend an informal review the first year.

A Personal Life. Most new faculty concur that during the first year it is hard to find room for a life outside of work. New faculty were frustrated by lack of opportunities to meet other new faculty, and by the lack of time to exercise, to go to the opera, to establish friendships, to attend to family. As one young father pointed out, even housekeeping suffers when one is juggling responsibilities of dual careers and children:

> The problem is when both our work schedules coincide in intensity things get tense. The house is starting to drive me crazy. There is a pile of laundry on the dining table every morning. I just push it aside. The place falls apart most of the time unless we know someone is coming over and then it has to be clean. There is no time to fold a pile of laundry, put dishes away, do simple things. We haven't fallen into a routine and we can't afford help. I always feel things are slipping through my fingers.

Moreover, compared to our interviews with faculty in 1983, new faculty expressed an even more acute need for more flexible employment polices – opportunities for spouses, flexible employee benefits (more childcare options, time limits for tenure). And although salary was not often mentioned, it appeared in discussions about life outside of work, especially among faculty with young children. As one new parent in the humanities concluded:

> I am committed to this career with no regrets but the money. It's a shame that a professor at this university cannot support a family of three on his income alone. After a truly minimal maternity leave, my wife is back at work and our 10-week-old daughter is in daycare. Why is it that a university of this size and quality cannot develop programs for its professional staff that will enhance the childbirth and infancy experience for both parents and baby? In this respect in concern for

children and mothers, especially the university has not only failed to take the lead (the function of universities, it seems to me), but to support the minimum.

Discussion

This study indicates that both satisfaction and stress run high among new faculty. The generally high level of morale among new faculty is perhaps the most encouraging finding from the first set of interviews. We have learned that the newest members of our academic community affirm the value of the academic life. But they also express particular concerns about workload, collegiality, tenure, and balancing work and personal life. As noted earlier, a number of these work-related stresses are consistent with other reports on new faculty (Fink, 1984; Jarvis, 1987; Turner & Boice, 1987). In addition, recent studies on the overall condition of the professoriate report similar themes and patterns. (Bowen & Schuster, 1986; Corcoran & Clark, 1984; Sorcinelli, 1985).

Our discussions with new faculty have provided many suggestions for enhancing the experience of junior faculty. In light of our preliminary findings, we set out two major goals: to encourage fledgling teaching and research interests and to foster a supportive intellectual community. These goals of encouragement and support take three major forms: rewards and recognition, programs and opportunities, and information. Some of our ongoing efforts include:

Annual Competitions:

Outstanding Young Faculty Award. In establishing research and teaching careers, untenured faculty feel severe time pressure. In response we've instituted an award which provides funds for released time from teaching and research assistance for five young faculty.

Multidisciplinary Seminars. Many new faculty express the desire to work with colleagues within and outside their departments and disciplines. We fund a series of multidiscipliary seminars to encourage collegiality and the intellectual growth of faculty members in new and multidisciplinary areas of inquiry. Proposed seminars can focus on teaching and/or research.

Instructional Development Summer Fellowships. New faculty consider teaching important, but need more support and recognition for efforts to improve. We offer six summer fellowships to encourage new or improved approaches to instruction. Fellows work with teaching consultants and participate in meeting with other fellows.

Programs and Opportunities:

New Faculty Orientation. New faculty members welcome information about the university. We begin each year with a reception for new faculty and their families. The reception brings newcomers together as a group and introduces them to key figures and resources on campus. The office follows up with luncheons throughout the year which gradually bring new faculty into contact with established faculty outside their discipline.

Tenure and Promotion Mentoring. We maintain a core of faculty members who are knowledgeable about the tenure and promotion process and who have indicated their willingness to work with faculty on an individual basis in the preparation of dossiers for tenure and promotion. We try to put junior faculty in touch with someone whose background would provide the most help.

Career Development Handbook Series. Junior faculty are concerned about professional growth and advancement. We have written two specific aids to advancement, the *Tenure and Promotion Handbook* (1985) and the *Teaching Evaluation Handbook* (1986). Two more books, the *Writing and Publishing Handbook* and the *Handbook For New Teachers* are in progress.

Career Development Workshops. New faculty are interested in a wide range of issues that affect not only professional, but also personal, development. Workshops offer them the opportunity to enlarge their knowledge about and discuss such issues. We sponsor several annual programs and popular topics incude: "Publishing and Writing," "Preparing for Tenure," "Evaluation of Teaching," and "Balancing Academic Work and Personal Life."

Future Challenges

The commitment to and satisfaction with academic work is apparent among new faculty at our institution. But significant work-related stresses must be addressed. Improvements in work environment and salary remain critical issues at the campus and university levels.

As noted, our office has created several awards, programs, and handbooks for new faculty, and many have responded positively to such support. But there is much that remains to be done. Based on initial findings, we have set some broad goals for the future. We would like:

- To provide more information to chairs and deans on the needs of new faculty
- To seek additional funds (for professional conferences, seventh-semester sabbatical programs, etc.)
- To encourage development of basic skills in teaching
- To increase understanding of a more diverse student population
- To encourage communication among new faculty and between new and senior faculty
- To foster more flexible employment policies

Three new initiatives are evolving. First, we need to discover ways to increase the sensitivity of school deans and department chairs to the special problems of junior faculty. Recently, our office sponsored a seminar on "The Chair As Faculty Developer," in which we reviewed and discussed findings from this study with deans and chairs. The interchange among participants was lively and we will initiate a series of programs for department chairs in the upcoming academic year.

Second, we need to look at institutional policies and practices that hinder the development of new faculty. Our office has just established a university-wide committee on "Work and Family." Together, administrators and faculty will begin to address more systematically such issues as dual careers, spouse employment, childcare, leave options, and the like.

Finally, we need to increase understanding of student learning among junior and other faculty. In the upcoming year, our office will coordinate an initiative on assessment. The goal is to identify and evaluate current assessment measures and to initiate appropriate improvements. We will bring together faculty, students, and administrators on our campus and we expect to work with other colleges and universities in the state to develop and share assessment plans and approaches.

Conclusion

This long-term study of new faculty has provided, and will continue to provide, a wealth of information on the satisfactions and concerns of junnior faculty at our institution. I would suggest that other faculty developers consider conducting studies of faculty life on their own campuses. Seeking out the opinions of faculty can have a number of long-term payoffs. An in-depth interview is a faculty development intervention. Oftentimes new faculty tell us that this is the first time anyone has cared enough to ask them about their satisfactions and concerns. Such a study also can heighten awareness of and appreciation for faculty and teaching development programs. A number of faculty we interviewed have applied for awards and participated in programs sponsored by our office. In addition, it is easier to propose, argue for, and sustain programs when they are grounded in faculty suggestions. Finally, such studies provide faculty developers with new insights about, and help them to create ties with, their faculty colleagues.

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Helping Faculty Meet New Pressures for Scholarly Writing

By Robert Boice

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The few reports of helping colleagues with scholarly writing in the faculty development literature have yet to address an important problem: What special problems await developers who try to implement programs for scholarly productivity on campuses where pressures for writing are new and probably unwelcome?

This paper provides one answer to that question with information about two groups new to pressures for scholarly writing: traditional faculty and librarians new to faculty status on regional university campuses with heavy demands for service including teaching.

The librarians in this study, like other faculty on traditionally teaching-oriented campuses, supposed that long-standing commitments to a service culture would conflict with the productivity culture often endorsed by the retention/promotion/tenure committees who decide faculty fates. These librarians chafed at prospects of being evaluated on the same terms as traditional faculty whose schedules seemingly permit more time for scholarship and research (e.g., Batt, 1985; Davidson, Thorson, & Stine, 1983; DeBoer & Culotta, 1987; Moran, 1984; Payne & Wagner, 1984; Stoan, 1984). And these traditional faculty chafed at new and seemingly capricious demands to master the demanding habits of writing for publication amidst teaching loads twice those of doctoral campuses.

From *To Improve the Academy: Resources for Student, Faculty, and Institutional Development*, Vol. 7. Edited by J. Kurfiss, L. Hilsen, S. Kahn, M.D. Sorcinelli, and R. Tiberius. POD/New Forums Press, 1988.

I report here the results of an ongoing program, now of two years' duration. Although my efforts include systematic help for faculty on teaching and collegiality, I concentrate here on the particularly challenging task of facilitating writing. The program began with two goals: The first goal consisted of visiting faculty and librarians in their work settings to observe work pressures and changes in coping styles firsthand. This strategy involved little more than usual survey methods for getting to know new faculty in traditional departments (Crawley, Atkins, & Gruen, 1987; Sorcinelli, 1986; Turner & Boice, 1987), except that visits were frequent and regular. In this instance, information about faculty and librarians was expected to reveal a sense of which developmental strategies could facilitate coping with new pressures for writing. Specifically, I wondered if faculty and librarians, despite their claims of busyness and negativism, could be helped to find the time and willingness neessary to writing.

The second goal came from initial observations of library faculty, a group typically neglected by faculty developers. I suspected that librarians might profit in learning to see traditional faculty as colleagues with similar strengths and problems.

Methods

Subjects

The librarians depicted here worked at a large regional university where they were full members of the faculty. They were paid on a salary schedule identical to that of the faculty, had ranks equivalent to those of the professoriat, were eligible for tenure and sabbaticals, and had representation in the university's senate, councils, and committees on the same basis as that of the traditional faculty. These librarians were members of the union representing the faculty at large and were by a negotiated agreement expected to work "an average of 40 hours in a seven-day period."

The librarians studied here represented each of the four academic ranks. All of them volunteered to be visited on a "spot observations schedule" by the author and to maintain daily records of their work activities for a period of at least one year. The study began with a sample of 12 library faculty, all of them veterans, all of them tenured. Midway through the study two newly hired and untenured librarians were added to the group; at that time three veteran librarians were dropped in response to indications of lack of interest in the program.

The comparison group of 12 traditional faculty members came from two large regional universities, four of them from the same campus as the librarians studied. This sample of faculty members was selected from a larger collection of observations on the basis of gender (there were four males in the librarian group) and years in service (there were only two librarians with less than 10 years of work experience). All the traditional faculty members in the sample came from campuses where pressures for scholarship, research, and publishing were seen as relatively new and often unwelcome.

Enlisting Participants

Recruitment of both samples in this study was aided by the support of administrators: essentially, the dean or the library director agreed to invite the observer/faculty developer to speak about the nature and aims of the project, make supportive comments about the potential values of the project, and work behind the scenes to coax (but not coerce) individuals to volunteer.

Self-Report Forms

Both groups completed simple self-report sheets each week; traditional faculty and librarians drew arrows on such sheets to indicate duration of time spent on particular activities (see Boice, Scepanski, & Wilson, 1987, for more details). Activities were coded using the kinds of taxonomies listed at the top of the sample sheets.

The observer (i.e., author), in his weekly, unannounced visits to participants, provided an important check on the objectivity of these self-reports. Upon appearing in the midst of whatever the librarian or professor was doing, the observer typically began by noting two things: 1) his own classification and ratings of the ongoing activity and 2) if the participant was maintaining the self-report form. Most participants reported that maintaining verified self-reports on a daily basis led to very different accounts of workweeks than they had previously reported in more retrospective surveys.

Tracking Participants

Except for a few instances when either participants or the observer were away from campus due to illness or vacation, most library faculty and traditional faculty were observed weekly over a 52-week period. Each such period preceded and carried beyond the bounds of a fall and a spring semester. Each weekly visit lasted from 10-20 minutes.

Potential times for visits came from previous self-report forms that indicated regularly schedduled activities, from information solicited about plans for coming weeks, and from administratively issued schedules.

Tracking visits were planned, where practical, to sample the typical range of on-campus activities for each participant. For example, in visits where participants were actively working wwith library users (e.g., providing reference service), the observer remained unobtrusive. During visits where participants had lulls in activity, the observer encouraged them to talk about their work by listening patiently and asking a few open-ended questions. On occasional, preplanned visits, all members of a sample group were asked a "question of the week" (e.g., "was spring vacation a time when you planned to do scholarly writing?"). Other visits to activities such as classroom teaching led to systematic ratings and advice which were shared wwith individual participants.

This format provided a strong sense of rapport between either faculty or librarians and the observer; although some librarians and faculty began as skeptics, all eventually expressed a fondness for the meetings and the support and interest conveyed in them. Many participants used these interactions for purposes of personal development.

Results and Discussion

Practicality and Reliability of the Methodology

Access to both sample groups for weekly observations was regular. The typical weekly investment of the observer's time in these observations (and in occasional failures to find some individuals) was about 4.5 hours for librarians and 6.0 hours for other faculty members. The difference in weekly investment owed to the location of the librarians in one building. An important point to be drawn from this information is that both groups were accessible and cooperative.

Except in dimensions of rating the subjective aspects of on-going activities, judgments about the kinds of activities and their location in time by faculty and the observer produced nearly perfect agreement. This result supports the contention that direct observational checks can enhance the reliability of faculty's self-reports of workweeks (Boice, 1987).

Do Librarians Have Less Time for Scholarly Writing?

The failure rate among the librarians in complying with observer requests for weekly self-report sheets – one in 12 (i.e., 8 percent) – is somewhat better than noncompliance rates of 14 percent found in the larger faculty sample from which the 12 faculty depicted here were drawn.

Figure 1 depicts the workweeks of the 11 librarians who completed tracking sheets during the 52 weeks of study. These reports confirmed indications in the literature (Moran, 1984) that librarians generally put in 40-hour workweeks on campus.

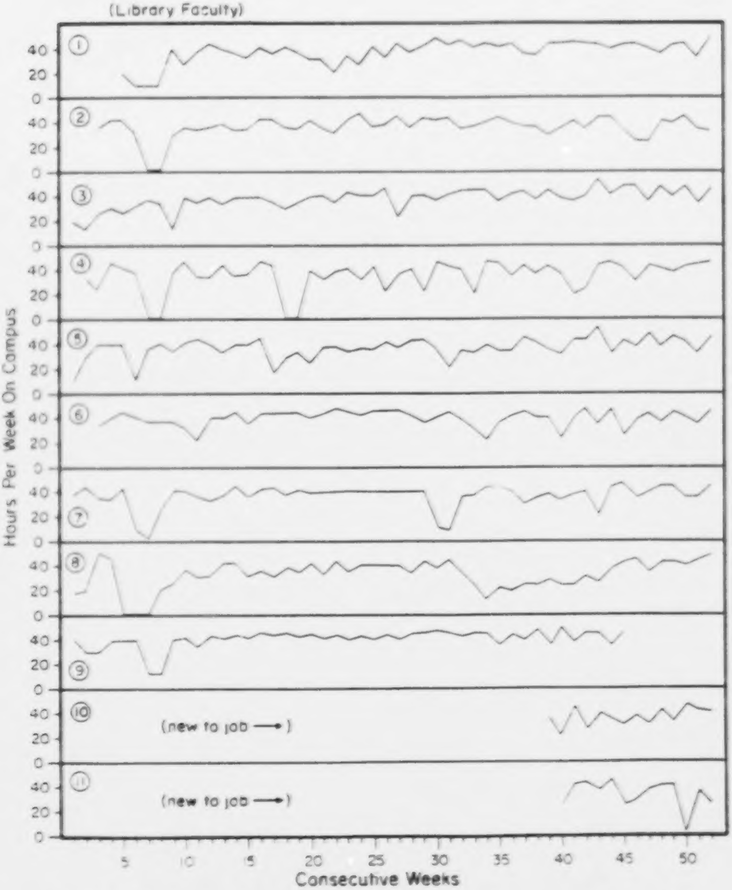

FIGURE 1. Individual graphs representing the workweeks of 11 librarians who regularly submitted self-report sheets during their participation in the project.

Figure 2 confirms the contention of librarians that they put in longer workweeks, on campus, than do the faculty. The 12 faculty members who completed timely and usable self-reports showed a pattern of on-campus workweeks much shorter than that of the librarians.

At first glance faculty members seemed to have time for research and scholarship whereas librarians did not.

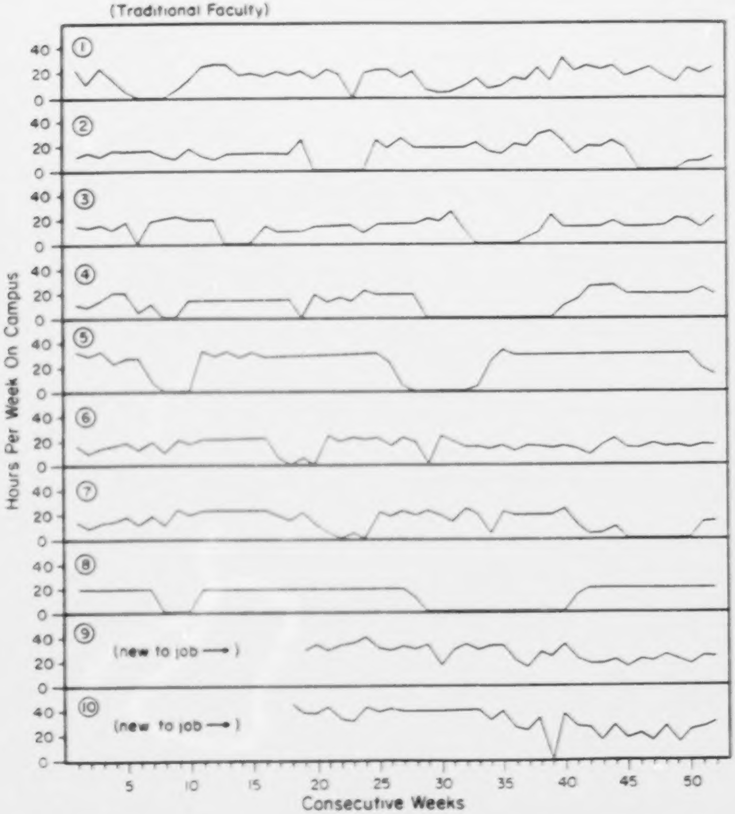

FIGURE 2. Individual graphs representing the workweeks of 10 faculty who regularly submitted self-report sheets during their participation in the project.

Complexities in the Search for Sufficient Time

Despite the initial appearance of available time, the traditional faculty members consistently claimed that they were too busy for scholarly writing. In addition to their report of an overall mean of around 25 hours per week on campus during semesters, all faculty (cf. only two librarians) indicated varying amounts of work-related activity carried out at home. Usual activities self-reported by faculty in home offices were grading papers and tests, preparing lectures and syllabi, and reading in preparation for lectures. If these unverified reports are given even partial credence, the workweeks of the faculty more closely approach those of librarians.

This is the point where reports of academicians coping with new pressures for research and scholarship usually end – with confirmation of claims for too little time in the midst of already overloaded schedules. But the tracking procedure used here suggested the need for further examination.

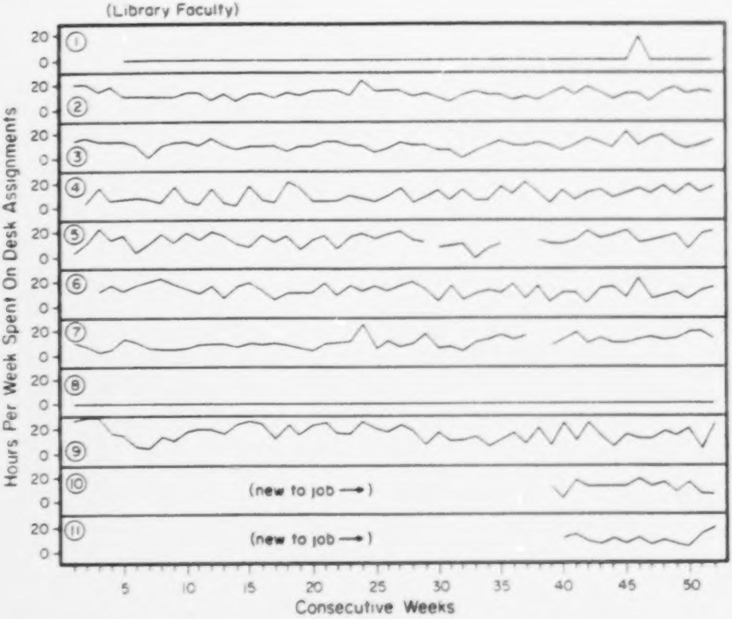

FIGURE 3. Individual graphs of desk assignments for the 11 librarians.

Weekly visits with both librarians and faculty members across a variety of activities frequently found them doing things that were spontaneously described by them as nonessential or inefficient. So, for example, faculty members might have had regular visitors during office hours who chatted for two hours about current events or sports; just as often faculty sat, during office hours, reading newspapers or magazines, waiting for students, or engaging in other relatively unproductive activities. Librarians often engaged in similar activities, so long as more structured tasks such as desk assignments did not intervene.

One way of assessing the availability of time for scholarship began with an examination of requirements for certain core activities. Figure 3 shows the mean time spent by librarians depicted in Figure 1 on desk assignments. These self-reported weekly means included time at the reference desk, at a separately staffed information desk, or at a bibliographic instruction station other than the classroom (a for-credit library skills program on campus required students to consult with librarians and other staff). An interesting aspect of Figure 3, a portrayal of the reference and consultation workweek of the librarians, is its resemblance to core workweeks of faculty members. Both cores hovered around 15-20 hours per week, for required desk assignments on one hand and for lecture time plus office hours on the other.

Of course, both groups typically added other, generally obligatory assignments to these cores. Both groups attended committee meetings. Faculty members often worked with students on individual projects. Librarians often worked with individual students and faculty in fulfilling information needs, for example by doing online searching, and they frequently lectured to classes. When these other essential activities are added to the reference and consultation activity, the resultant patterns of at least 25-28 hour workweeks for these librarians began to resemble the on-campus workweeks of traditional faculty as inferred from Figure 2.

Even when blocks of time for additional assignments of librarians (e.g., collection development) and of faculty (e.g., serving as a referee for a scholarly journal) were added, this deeper analysis of the tracking data produced a surprise. Both groups still seemed to have discretionary time, at least parts of which might be devoted to scholarship. When asked about this possibility, almost every person in both groups gave the same answer: the occasional breaks of 30 minutes or so, in an otherwise busy schedule, were not sufficient for scholarship. Writing, they pointed out in near unison, requires large blocks of undisrupted time.

I was tempted, in the face of these earnest arguments, to concede. The librarians and faculty under study here were already doing a conscientious and competent job in the service sphere. Should we expect more?

One answer is that scholarly writing is now a required activity for both groups. A second answer is that scholarship can enhance the kinds of services librarians and faculty provide (e.g., as better informed scholars with a timely knowledge of new developments in their disciplines).

The Initial Attempt at Facilitating Writing in the Midst of Busy Schedules

The minority of faculty members in this sample who managed to get writing done helped provide a clue about solutions for busyness. The most effficient and productive writers simply wrote during the brief openings in their service-oriented schedules. Equally important, they made writing a priority activity, one during which distractions such as phone calls were minimized.

This potential solution was presented to both groups in the form of brief workshops held during the first two months of their participation in this project.

Short-Term Results: Did Faculty and Librarians Make Use of Available Time?

All 24 of the subjects in the present study listened cooperatively to the arguments for writing in the midst of their service obligations and busy schedules, but few in either group pursued the idea seriously during the first six months of the study.

Eight people from the faculty group began writing occasionally during their on-campus workweeks and over the first half year of participation; four wrote somewhat regularly. Only five of the librarians approached writing occasionally amidst other campus activities during the equivalent time span; none wrote regularly. But neither group, in the first six months, produced writing on campus that promised to meet the expectations of their campus administrators (of about one article per year published in refereed journals).

Why Most Faculty Members and Librarians Didn't Write Productively in the Short Run

Reasons why both librarians and faculty were generally unproductive writers replicated results found elsewhere. Reported inhibitions to scholarly writing include fears of failure or perhaps success, cruel reviewers, and competition for limited space in journals. But the fact remains that some librarians and some faculty did publish in the short run.

Why is it that most of the individuals observed here persisted in old patterns of non-productivity?

One reason may be momentum. I suspected that an investment longer than half a year may be needed to change long-standing habits of devoting workweeks almost exclusively to service for students and others in the academic community. A second reason derived from another dimension of habit. Faculty and librarians unused to scholarship reported feeling unprepared and unqualified to begin writing; they seemed to need time to acclimate to the idea of generating useful ideas and publishable prose.

Table 1 summarizes the comments of both groups about why they were making little sustained effort at writing in the short run. All the comments were recorded during weekly observations, some as responses to "questions of the week," the rest as spontaneous comments. Two salient features of that table are: 1) the similarity between librarians and faculty members (except for one dimension) in reasons for not writing, and 2) the persistence of these faculty in using busyness as an impediment. The single reason that distinguished the two groups was the belief by librarians that writing inevitabley undermines teamwork in providing service valued by them. Faculty, in contrast, seemed to place little value on teamwork.

Table 1 seems to provide useful insights about reasons for not writing in the short run. First, maladaptive beliefs about scholarly writing were maintained beyond my expectations. Second, unproductive writers may have been stymied by a lack of ideas and of cultural support; the tradition-

TABLE 1
Summary of Reasons Given in the Short Run by Both Groups for Not Doing Scholarly Writing

	Rank Order of Reason in Terms of Popularity	
Reason	Librarians	Faculty Members
Too busy to write	1	1
Service to patrons/students comes first	2	2
Writing necessitates poor teamwork re service	3	—*
Good writing requires large blocks of time	3	3
Only original, significant thoughts merit publication	5	4
The editorial process is cruel and unfair/fears of failure	6	5
Writing is inherently aversive	7	6

*Never mentioned by traditional faculty members al service-oriented culture of both groups provides little encouragement or "continuing education" for scholarly writing. Becoming a productive writer may have required more than finding time.

Signs of Success in the Longer Run

Here again, first glances proved misleading. At the end of an entire year of participation in the faculty development programs aimed, in part, at facilitating scholarly writing, neither faculty nor librarians showed substantial increases over activity levels at midpoint. Thus, the initial impression was that the extra time and participation (of extending the study to a full year) had little impact. Except for the moderate levels of writing activity shown by a few faculty and librarians from the outset and by the two new members of each group (all of whom were hired with clear expectations of writing), levels of involvement during workweeks seemed to remain fairly constant throughout the study period.

TABLE 2
Ratings (Based on Periodic Self-Statements of Librarians) of Readiness* for Scholarly Writing Over the Course of One Year of Observations

	Periodic Instances of Questions About Status as Writer							
Librarian	1	2	3	4	5	6	7	8
#1	2	2	1	3	4	3	4	4
#2	1	1	1	1	1	1	1	1
#3	1	1	1	1	5	5	5	5
#4	5	1	1	5	5	5	5	5
#5	2	1	1	1	3	3	3	3
#6	2	1	2	1	3	3	4	4
#7	2	2	2	2	5	5	5	5
#8	1	1	1	1				
#9	1	1	1	2	3	4	4	4
#10	newly hired ⇒			2	6	6	6	4
#11	newly hired ⇒			2	4	6	4	6
X	1.9	1.2	1.2	1.9	3.5	3.7	3.7	3.7

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*Readiness ratings followed this system: 1 = no plans for writing and reject writing as appropriate for librarians; 2 = no plans for writing, but accept writing as appropriate; 3 = states specific plans for writing, but no writing being done; 4 = specifies ongoing, preliminary efforts at writing (e.g., doing literature search; 5 = doing writing, but off-campus only; 6 = doing writing on and off campus.

Closer examination of subtle indices, however, provided a more optimistic picture of helping faculty and librarians cope with pressures for scholarship. While, for instance, the rank-ordering of complaints about being pressured to write (Table 1) did not change, the frequency of such objections dropped by half from the 6-month to the 12-month points of observation for both groups. Moreover, these complaints were issued to the observer in less strident, challenging fashion than during the first half of the study year.

Table 2 and 3 depict another, more direct means of arguing for subtle but significant changes in the ways faculty and librarians eventually began coping with pressures for scholarship. Although a few faculty and librarians (all of them veterans of campuses where they had *not* been expected to publish) steadfastly maintained refusals to accept scholarly writing as part of their job descriptions, their colleagues generally showed noticeable shifts in attitudes and practices related to writing by the second half of the year of study. Four faculty and four librarians had moved two

TABLE 3
Ratings (Based on Periodic Self-Statements of Faculty) of Readiness* for Scholarly Writing Over the Course of One Year of Observations

	Periodic Instances of Questions About Status as Writer							
Faculty Member	1	2	3	4	5	6	7	8
#1	6	6	6	6	6	6	6	6
#2	1	2	2	2	2	3	3	4
#3	2	1	1	1	1	1	1	1
#4	1	2	2	2	2	3	4	4
#5	1	2	1	2	2	2	2	3
#6	5	5	4	4	5	4	5	5
#7	1	1	2	3	4	5	4	5
#8	2	2	3	3	3	4	4	4
#9	newly hired ⇒				2	2	3	4
#10	newly hired ⇒				4	5	5	5
X	2.4	2.6	2.6	2.9	3.1	3.5	3.7	4.1

*Readiness ratings followed this system: 1 = no plans for writing and reject writing as appropriate for librarians; 2 = no plans for writing, but accept writing as appropriate; 3 = states specific plans for writing, but no writing being done; 4 = specifies ongoing, preliminary efforts at writing (e.g., doing literature search; 5 = doing writing, but off-campus only; 6 = doing writing on and off campus.

steps in the "readiness" scale used in Tables 2 and 3; they had generally advanced from skepticism or inactivity to preliminary writing activities. Three faculty and four librarians progressed even farther, moving from skepticism and/or inactivity to regular writing sessions.

The causes for these general shifts in readiness for writing seemed to include time and momentum. Both groups seemed to need opportunities to rethink initial skepticism. Both seemed to move deliberately in acquiring new habits of thinking about themselves as writers and of practicing writing.

Causes for the shifts in readiness seen in Tables 2 and 3 may also have owed to factors beyond the faculty development programs. The appearance of new faculty (who brought positive attitudes and active plans for writing with them) may have stimulated senior colleagues to change.

A reminder that faculty development programs rarely work as expected came in collecting the evidence summarized in Tables 2 and 3. Most of the faculty and librarians active in preliminaries or actual writing persisted in expressions of distaste for writing; the changes in scholarly productivity, at least in the time span studied here, were not accompanied by equivalent changes in attitudes. The faculty and librarians involved felt adamant about *never* accepting the pressure for writing productivity as willingly as they accepted service commitments.

In fact, a striking bit of resistance to the faculty development programs employed here can be seen in the reluctance of either group to write regularly on campus, during workweeks. Perhaps membershsip on campuses with strong service traditions means that writing, even when the task is accepted to the point of regular practice, is kept psychologically serparate from service activities including teaching. A typical comment of writers in both groups was that while writing may be worthwhile, it should not be done on the job, at taxpayer expense.

As observations continue, changes may be seen in the attitudes and practices of these librarians and faculty. I plan to check for even further involvement in writing, including indices of success in publishing. What the library director and I hope to do next will incorporate a program of outreach services (mainly literature searches) with ongoing efforts including writing. We expect two benefits in this broadening: an energizing effect that may generalize to things like writing and an increased appreciation of librarians by traditional faculty.

In sum, many librarians and faculty can make significant strides toward coping with new pressures for scholarship in just a year. What I hope to see next is that campuses steeped in service traditions can blend those commitments with the product cultures imported from doctorate granting campuses.

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On Being A Faculty Member Or Things Your Dissertation Adviser Never Told You

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> "For me, perhaps for most of us, it's the hardest experience we've had in our lives."
>
> "I was very naive. I had trouble being called 'doctor.' There were so many different things to learn to do."
>
> "I'm happy to be teaching, I enjoy research, I thoroughly like being a professor. I don't like all the pressures – sometimes it's just too much. I thought I would have a personal life, but my work is consuming all my time."
>
> "The toughest thing is to do a good job with a career that could consume all available time, pay attention to a spouse and children, publish or perish, teach well, lead an examined life, and keep out of debt."

Thus speak new faculty during their first year as professors (Sorcinelli & Gregory, 1987; Turner & Boice, 1987b). In the decade ahead, up to fifty

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percent of the current faculty will reach retirement age and an increasing number of new faculty will join the ranks of professors (Diner, 1985; George and Winfield-Laird, 1984; Jarvis, 1987). Because, for the most part, we don't prepare the professor-to-be in graduate school for the realities of the academy, many may suffer; some talented people may even be driven away (Bowen & Schuster, 1985; Seldin, 1987). Even for those who survive the transition from graduate student to faculty status, those first few years will be difficult. Graduate students are trained to be experts in their discipline and skillful scholars, but most aren't taught about the qualities of being a "good" colleague and a "good" academic citizen (Buxton, 1956; Lowman, 1984; Morris, 1970; Professor X, 1973; Vairo & Perel, 1969). Although many papers and books give advice to new faculty concerning teaching and research, little has been written about the rest of academic life: what to expect in the new position and how to behave as a professor (Buxton, 1956; Eble, 1983, Lowman, 1984; McKeachie, 1986; Morris, 1970; Udolf, 1976; Vairo & Perel, 1969).

Through our roles as a department chair and as faculty developers, we have observed new faculty closely and have become aware of their plight. The following is a distillation of advice from a number of sources including relevant literature, our extensive experiences with new faculty and what new professors have to say about those first few years. It is presented to help new faculty members (or those re-entering after an absence from academia) adapt more quickly and with less pain to their new environment. This essay is also advice to chairs, deans and faculty development personnel about the problems, and some solutions to them, that new faculty face as they enter the academy.

Writers of advice to young professors are disinclined to approach the matter from multiple perspectives. And yet that is precisely what is required. The beginning assistant professor must realize that his or her perspective is limited and prone to systematic bias. A first step toward professional maturity is to recognize that one's students, colleagues, chairperson and higher administrators have their own point of view (Buxton, 1956; Clark, 1987; Cornford, 1978; Diner, 1985; Hanna, 1981; Jarvis, 1987; Lambreth, 1971; Noonan, 1980; Ryor, 1978).

Although as a new faculty member you may have considered some or all of the issues and problems presented in this essay, some of the solutions suggested may not have occurred to you. And perhaps the knowledge that you are not alone in your trials may be comforting to you.

Despite the somewhat contrary tone of what follows (advice to new faculty is often negative in tone) be assured that the life of the academician is great and most of us wouldn't choose any other (Clark, 1987; Livsey, 1975; Professor X, 1973). Although the first years may be stressful at times and you may feel terribly busy, you will also find it to be more exciting and satisfying than almost anything else you have experienced. To quote a beer commercial, "It doesn't get any better than this."

Out of the Nest

As a new faculty member, you may be disappointed in the quality of the students, faculty colleagues, research support and opportunities, recognition, and intellectual stimulation and challenge you find in your first teaching job. A moment's thought will reveal some of the causes of these disappointments. When you take your first teaching job, you will probably have moved from a prestigious Ph.D.–granting "research university" to one that is smaller and less prestigious. The last students you had the most contact with were other graduate students, most working on their doctorates; undergraduate students, even Masters students, can hardly compare. Your new faculty colleagues may be less famous than your dissertation director, and the bulk will be much more senior in age (Fink, 1984; George & Winfield-Laird; 1984; Long, Allison, & McGinnis, 1979). As a matter of fact, you may be the first new faculty member hired in over a decade (Jarvis, 1987). (You may also be saddled with the awesome task of "turning this department around in terms of scholarship.")

Even if your new school is not a research university and provides little, if any, support for research, your new colleagues and the administration still may expect (demand) that you do research in order to get tenure (Jarvis, 1987). And the support that is available may be tightly controlled by older faculty who may or may not be productive scholars. You may not get your share. It is very important for you to be flexible about your research during these first years. You can't wait for that "megabucks" piece of equipment or grant to get your research under way; you've got to go with what's available. One way of getting some research going would be to develop collaborative research with a productive senior colleague. Being willing to change what you will do in research may be essential to your survival (Boice & Turner, 1987; Jarvis, 1987).

Your fantasy of a community of scholars sitting around discussing the problems of your discipline may also be unfulfilled. The bull sessions you had with your peers, the graduate seminars and the meetings with your dissertation adviser were focused and highly stimulating. Your new colleagues are busy with their own lives and careers. Some may be threatened by you and others simply weary of discussing the same issues again. Remember, they've been through this all before, have heard their colleagues' arguments on all the issues a dozen times and are, perhaps, a bit jaded or even cynical (Bowen & Schuster, 1985; Fink, 1987; Seldin, 1987; Turner & Boice, 1987a, 1987b).

The change from being a graduate student, when there was fairly constant praise for doing research and making class presentations, to being a faculty member where such praise is rare is dramatic, perhaps even traumatic. It may seem that no one cares whether you are doing research, struggling with your classes, having difficulty in finding a place to live, or having problems with the rest of your life. Even your department chair's interest may seem driven by other than altruistic motives. You may find that the most sympathetic and concerned individual in the department is the secretary (Lambreth, 1971; Lowman, 1984).

Here you are, finally out of school and in your first professional position. You have just finished years of effort and, at least some agony. You've finally reached the top, earned your degree. Now you suddenly find yourself at the bottom again, faced with a new series of tests of your motivation, worth and spirit. As hard as graduate school was, you may find these first years as a professor even harder. You will be amazed at how much time it takes to prepare for your classes and to get your research going. It will be the busiest time in your life (Glidden, 1988; Sorcinelli & Gregory, 1987; Turner & Boice, 1987a, 1987b).

To this already disheartening list, add loneliness (Lambreth, 1971; Noonan, 1980; Turner & Boice; 1987a, 1987b). Being in a strange town, one that isn't half as nice as the one you've just left, knowing no one and surrounded by people who don't seem to care (and most of whom you might not choose to associate with anyway), what are you to do? Don't despair; there are things *you* can do and the life of the professor is worth the effort (Grasha, 1987).

Coping By Taking Charge

Wise university administrations recognize the problems new faculty face and develop strategies to help them cope. If that is true at your new school, be sure to take advantage of all that is offered, even if it seems "mickey mouse" and a huge waste of your limited time (Quick, 1987; Turner & Boice, 1987b). If your new university has not provided means to help you cope, then you will have to *take charge yourself*. Recognize that you have some control over your world (Grasha, 1987; Peterson & Seligman; 1984; Phares, 1976). Other new faculty, including those who came last year, are in the same rocky boat as you; seek them out. Attend all the functions held for new faculty (no matter how trivial they may seem) and make an effort to meet one or more new people at each meeting. Meeting new people may be particularly difficult for those who are introverted, but the results will be worth it. When you meet other new faculty, explore their extra- professional interests. Make arrangements to go jogging, to a movie or to a concert. And be specific, don't leave it at, "Yeah, we'll have to go jogging together some time." Set a specific day and time. You must make the extra effort to make contact with other faculty if you are to avoid being lonely – even if you come to the university with your family. It is very important that you establish some social life *with faculty colleagues*, and other new faculty may be your best bet (Grashsa, 1987).

There are other steps you can take in your own department that will help reduce your loneliness and also speed your integration into the academy. These steps have the additional advantages of getting your colleagues to know you, an important factor at retention and tenure review time. They may also provide the opportunity for you to find a mentor (Fink, 1984; Hipps, 1980; Lambreth, 1971; McKeachie, 1979; Nelsen & Siegel, 1980; Turner & Boice, 1987a, 1987b).

Take the time to find out about your new department colleagues – both their professional interests and their hobbies (Seldin, 1987). (You never know when you might discover another who is fascinated by warthogs.) In an ideal world, senior faculty will take the initiative, but in reality most will not. There are a number of very positive things that might result from your efforts. First, you may discover a rich source of knowledge that will aid you in teaching, research or finding your way through the maze of the university – and you must learn the maze. Second, one of the old guard may turn out to be a valued mentor who can help you establish your career. Pay particular attention to those members of the department who have been successful. Even if none of your new colleagues ends up as your mentor, some may provide valuable advice for your success. Third, mentor or not, age differences as they might be, you may find a friend or intellectual companion. Fourth, your interest in your senior colleagues may leave them with a positive attitude toward you, and that may help during retention and tenure review. Exchange guest lectures or team-teach with some of your more senior peers. This will give them an opportunity to observe your teaching and for you, perhaps, to get some pointers on your own teaching. Ask them to sit in on your classes; ask – be careful here that you don't threaten them – if you may sit in on theirs (Bakker & Lacy, 1980; Turner & Boice, 1987a, 1987b).

Getting to know your colleagues is important, but a word of caution is also necessary. Beneath a facade of collegiality, some departments are riddled with divisiveness. Some of your senior colleagues may try to recruit you to their side. Be slow to take sides on issues until you know what all the sides are and what the "real agenda" is. We're certainly not suggesting that you follow any but the dictates of your conscience, but we are suggesting that being prudent in your first year may save you difficulties later on. Avoid becoming a member of a clique. And be a little wary of those who might seek you out in the guise of becoming your mentor; they may have other motives. Gossiping about other faculty or the administration is unprofessional and your participation may get back to the subject of the gossip (Hanna, 1981).

Also recognize that in almost every department there are one or more senior faculty who have become disillusioned, bitter and cynical – carefully evaluate the advice you get from them. In general, senior faculty tend to give new faculty warnings about the administration, the chair, other faculty, what is important and what to avoid (Boice, 1987; Fink, 1984; Hanna, 1981; Lambreth, 1971; Livsey, 1975; Lowman, 1984; Noonan, 1980; Professor X, 1973; Seldin,1987). Don't let this general negativism get you down. (And don't let this essay make you paranoid!) Those who complain the loudest are still at the academy and wouldn't leave even if given the chance. Don't believe those who say, "The University would be a great place to be if it weren't for the students." Complaining about students seems to be as much a part of academia as the chalk (Hanna, 1981). Some faculty can't admit that they love their students and their role as a professor (Atkins & Hagaseth, 1987; Clark, 1987).

In Service to the Academy and Yourself

Along with teaching and scholarship, a third area that is typically evaluated in decisions concerning retention and tenure is service to the department and university. Although service to the university is usually viewed as an essential part of the professor's work, it is often given little weight in the decision process. Contrary to what others might advise, we encourage you to become involved, in a limited way, in department or college committees (Cornford, 1978; Higham, 1974; Jarvis, 1987; Vairo & Perel, 1969). You may be fortunate and have a department chair who assigns you to committees to get you involved, but who also protects you from too much committee work or getting only those assignments no one else wants to do. If it is apparent that as the "new kid on the block" you are being stuck with those rotten jobs, be sure to talk to your chair and seek relief.

Although service doesn't count as much as teaching or research in retention/tenure decisions, it is an essential aspect of your professional life. More importantly, faculty *should* participate in the formation of academic policy at all levels of the university (Atkins & Hageseth, 1987; Bowen & Schuster, 1985; Buxton, 1956; Clark, 1987; Diner, 1985; Jarvis, 1987; Ryor, 1978; Vairo & Perel, 1969). There are several reasons why some limited participation for new faculty is especially important. First, serving on department and college committees is a part of the responsibility of *all* faculty members and it is important that you do your share. Second, work on committees will help you to get to know other faculty and them to get to know you. This limited contact with you may be all that many of your colleagues will ever have, so be sure to do a good job as a committee member (come on time, do your homework, listen carefully to the debate, and so forth). Treat even those who are "wrong" (i.e., disagree with your view) with courtesy. Don't be too quick to judge your new colleagues in a negative way. Where you are now, they once were; where they are now, you will be someday. Diplomacy is always a good policy. Third, the workings of the committees may give you insight into the workings of the department or college and how to get around in your new political environment. Fourth, taking an active part on committees may give you a sense of control and the feeling that you can have an impact on your world (Grasha, 1987; Quick, 1987; Seldin, 1987). A word of caution about the impact of committee reports on the workings of a university: academia is notoriously conservative and change and new ideas, even good ones, are slow to be accepted and implemented. But if you keep on plugging away and are willing to put out the effort, eventually you'll see your ideas adopted. Remember, even the Grand Canyon started out as just a low place on the surface of the earth (Cornford, 1978).

Students – The Pleasure of Their Company

One of your greatest pleasures (and frustrations) will be your work with students (Grasha, 1987; Seldin, 1987). Most of us get excited and derive real satisfaction from talking to our students about our discipline and watching them acquire knowledge and skill in dealing with its concepts, theories and methods. Teaching is fun, and watching students grow and mature is indeed a pleasure (Jarvis, 1987). You will form relationships with some students that will last the rest of your life. But again a word of caution. It is tempting during your first years as a faculty member, especially if you have been disappointed with the level of intellectual stimulation or collegiality from your peers, to turn to your students for companionship. They are often closer to you in age, may be more stimulating intellectually than your colleagues and, in addition, may provide you with just the rewards you need but fail to get from your peers. Unlike your colleagues, your students recognize your brilliance as a researcher, admire your talents as a teacher and listen respectfully to your every word (Turner & Boice, 1987b).

Of course it's okay to make friends with your students, but there are a number of reasons for avoiding having your students as your only social and intellectual companions. First, your students will only be around for a short time. One of the sad aspects of our profession is that even those students we become closest to, those we have mentored, eventually leave and go on to jobs or other schools. When students leave it is sad for them and for us too. If your only social and intellectual life is tied to students, it will be violently disrupted from time to time and it may leave you depressed (Lowman, 1984). Second, if you are to be a part of the academy, you must develop compatible relationships with at least some of your colleagues. To fail to do so will result in your being isolated from much that is important in being a professor (Noonan, 1980). Third, faculty who are intellectual and social isolates may be judged less positively than their more "assimilated" cohorts. Unfair as this may seem, it is a part of the realities of academic life (Lambreth, 1971). Finally, your peers can provide a better forum in which to test your ideas and to get judgments of the quality of your work than students can; they also will be the final arbiters of you as a professional. Analysis of the careers of professors has indicated that our relationships with our students, even the pleasures of teaching, will not sustain us throughout our careers. We need our colleagues' respect, approval and friendship to remain happy in our profession over the long haul (McKeachie, 1979; Turner & Boice, 1987a, 1987b).

Working with students is exciting and fun – enjoy it. One way of getting this contact, especially with students in your own department who are not in your classes, is to volunteer to be an adviser. This is another example of taking charge of your life. By doing so you will not only meet students and do your department a service, but also learn, because you must, the details of department curricular policy as it affects students (Buxton, 1956; Diner, 1985).

The Power of the Professor

Faculty enjoy a very special relationship with their students. Whether we wish it or not, in addition to being intellectual guides to our students, we are also in a position of power over them. Many professional organizations and university faculty handbooks are explicit in the rules governing our relationships with students (McKeachie, 1986; Strohm, 1987). They tell us we must *always* behave toward our students in a professional way. We must treat them with respect regardless of the provocations we might perceive. To do otherwise is wrong both professionally and morally. We must never use our position to our advantage no matter how willing our advisees or students may seem – they don't really have freedom of choice. Their willing compliance may be out of fear even if they don't recognize it themselves. So we must not "use" our students to do our research, grade our papers, wash our cars and so forth unless they are paid a respectable wage for doing it (McKeachie, 1986; Strohm, 1987).

One additional "Thou shalt not" is to avoid gossiping about your colleagues with your students. Although it may be tempting, especially about some of your colleagues, it is unprofessional and what you say may get back to those who are the subject of the gossip. You must never use students to wage intramural battles within the department or university. Remember also that students believe that what they tell us will remain confidential and we must honor that confidentiality. But if a student should praise a colleague to you, pass it on; we're all hungry for those rare rewards for our teaching and your colleague will greatly appreciate the information. Of course student complaints about harassment or coercion by faculty members should be directed to the proper authority. Faculty handbooks usually describe the procedures to be followed (Strohm, 1987).

Working with students is often the most exciting and challenging part of our professional activities. Serving as a mentor for another, although difficult to do, is truly rewarding. As you can see, teaching is far more complex than simply being prepared before you go to class and presenting interesting and well organized lectures (Eble, 1983).

Sex and the College Professor

Even with today's more liberal sexual standards, we must not become involved sexually with our students or advisees – even if they are the ones who initiate the activity. Everyone agrees that sexual contact between student and professor is wrong and yet it seems to keep happening (Dziech & Weiner, 1984). Why does a person who has always behaved ethically before suddenly violate this principle? Our guess is that we usually see our involvements with other people as unique. We believe those general principles that apply to others don't fit us in this particular situation. But they do! If you ever find yourself saying something like, "This is different than those other situations," then you know you are on the verge of making a tragic mistake. Stop! Run, don't walk, to a trusted friend and ask for his or her advice (A. Lewis, personal communication). This is a very difficult area and one in which it is easy to go wrong (McKeachie, 1986).

The Staff of Life

Secretaries are often the people most essential to making a department work. They usually know more about department operations than anyone else and can be of great help to the new professor. Give them your respect and courtesy. They are typically overworked and underpaid considering the centrality of their position, and a kind word of appreciation for what they do for you is important. Never ask them to do personal work or place them in an awkward position by asking them to break department rules. Make sure you always get the work you ask them to do in with plenty of lead time; departments usually have priorities for the work the staff must do. Having the staff on your side will make your job much easier; having them against you may make your job impossible (Higham, 1974).

Relationship to the Department Chair

Your department chair can be of immense help to you during those first hectic years. He or she knows the answers to many of the questions you have for surviving. Perhaps more critically, chairs are usually required to make some judgment about your continued appointment.

In addition, the chair usually makes decisions concerning the allocation of travel funds, money for supplies and equipment, the assignment of courses and graduate assistants, and so forth. The chair can help you only if he or she knows what you need. The worst that can happen is that the chair will say no to your request. When you have reached an agreement with your chair about support for any purpose, be sure to get it in writing. We advise this not because we believe chairs are dishonest or capricious (some of our best friends have been chairs) but because people often forget. One easy way to "get it in writing" is to write the chair a memo summarizing the agreement as you understood it: "My understanding is that you will support my presentation at the Phrenological Society of America by paying for my air fare to Los Angeles..." Although this doesn't guarantee you won't have problems, it may help you win your argument if your chair does forget. Of course you should keep a copy of the memo for your own records.

The chair has an investment in your success; he or she has been instrumental in hiring you and doesn't wish to have to admit to an error. In addition, many chairs are chairing just because they are interested in helping their colleagues be successful in their careers.

The chair can serve as a mentor in many ways. Don't be reluctant to seek his or her advice and share your concerns or problems. If you are struggling with your teaching or research, talk to the chair; he or she is going to find out about it eventually anyway and the sooner you get help, the sooner the problem can be solved. In those rare (we hope) instances in which the chair isn't really interested in helping, it will soon become obvious to you and you can seek help elsewhere (Atkins & Hagaseth, 1987; Buxton, 1956; Higham, 1974; Turner & Boice, 1987b).

Potpourri

Here are a number of other bits of advice that might be useful to new faculty members.

Learn the governance system and where the decisions in your department and college are really made. Be sure to follow the "chain of command"; no one likes being bypassed. Those who follow the chain of command earn the reputation for being cooperative and a "team player." Those who don't are seen as trouble makers (Boice, 1987; Livsey, 1975; Nitzsche, 1978).

One of the duties in teaching is assigning grades. One aspect of this is whether your grading fits the "norms" of the department. Of course you should assign grades to students based on your determination of what they have earned, but recognize that if you assign much higher or lower grades than your peers, it will have an impact on how they perceive you. When in doubt, discuss it with your mentor or chair (Buxton, 1956; McKeachie, 1986).

It is important that you keep careful records of the things you do that could be part of your credentials for retention/tenure review. The ad hoc committee you are spending so much time on now may be forgotten, even by you, unless you keep a record. In this "Brag File" keep a list of the students you direct in theses or independent projects, copies of syllabi for your courses, unsolicited letters of appreciation for your teaching or off-campus professional service, and anything else that will help describe the work you do. In the end you may not include any of this information in your dossier, but if you don't have it, you can't use it.

And finally a note about "dressing for success." It shouldn't make a difference, but how you choose to dress will influence how you're viewed by both your students and your colleagues. If your clothes aren't all that important to you, then adopt the norm (Eble, 1983; Nitzsche, 1978).

Is There Life After Office Hours?

Professing is a job that has no end: there is always another journal article to read, more material to review before going to class, more data to be gathered, more writing to be done and an endless number of issues on campus that need to be dealt with *now*. When can you call it a day without the pangs of guilt that you haven't done it all or done it right yet? Will there ever be time for the non-academic you? For your family? Perhaps the only way to deal with this problem is to recognize that since professing will eat up all your free time, just don't have any free time (Glidden, 1988; Morris, 1970; Sorcinelli & Gregory, 1987; Turner & Boice, 1987a, 1987b). Let us explain.

To protect yourself from the tyranny of our profession you may have to schedule your time for yourself and with your family in the same rigid way that your classes, writing and research time are scheduled. Managing your time during these early years in which you are incredibly busy is essential to your survival (Grasha, 1987; Turner & Boice, 1987a, 1987b).

Senior faculty and department chairs (except for some of the women among us) may not understand the conflict younger faculty with families must face. Many of us who are senior faculty were infused with a work ethic that told us that doing the job well served not only ourselves but our families. Devoting 100% of our time to the profession and academy was not only accepted, it was expected. We also were likely to have a wife (most of us were men) who could do all those other things we didn't do, such as being mother *and* father to our children, taking care of the lawn, and attending Little League. (Sorcinelli & Gregory, 1987).

Younger faculty may have a different kind of consciousness; they are more often one of a professional pair, both of whom have tremendous demands on their time. In addition, younger faculty may perceive (correctly, in our view) the family to be equal to or greater than the profession in importance. As some senior women professors have known for decades, dividing time between profession and family makes meeting the demands of either role very difficult. The conflict between profession and family continues to be an especially difficult area for women faculty (Sorcinelli & Gregory, 1987).

Dual-career couples report they frequently encounter stress as they attempt to balance career and family. The following suggestions to professional couples might help them deal with those stresses. First, good communication is critical. Couples must consult with each other about professional responsibilities and opportunities. Each must have the opportunity to achieve and to grow. Second, to avoid conflicts, the professional couple must cooperatively plan and organize their lives to take into account the times when work loads are heaviest (mid-terms, conference papers dealines, etc.). Third, although family and household chores should be divided on the basis of skill and preference, fairness of the division is probably more important. Hiring outside help may be a way to deal with too much to do and too little time to do it in. Hiring someone to mow the lawn may save your sanity. Fourth, couples can help to control their stress by seeking support from others in similar circumstances. Sharing ideas for solving problems can be very helpful. Fifth, couples living away from their extended families can sometimes find surrogates in their neighbors or service organizations. Finally, having a sense of your priorities and remaining flexible will be essential when you must modify your plans because unexpected work or opportunities arise (e.g., a manuscript dealine or chance to go to a conference to give a paper). As dual-career couples know, the problem is large and complex. Long-term solutions to the difficulties professional couples encounter must include the institutions as well as the individuals involved (Quick, 1987; Sorcinelli & Gregory, 1987).

A Postscript

As we warned you, advice from more senior faculty tends to be largely negative and so has this essay been filled with warnings, cautions and "Thou Shalts" or "Thou Shalt Nots." Even though our tone may seem negative tone, we hope the very intense and real feelings of pride and joy at being a professor that most of us who are members of the academy share come through (Clark, 1987). So work hard, enjoy your classes and hold on to those passionate feelings you have about your teaching and scholarship. Before long, you will have jumped the hurdles and become tenured. Soon after that, you'll find yourself warning all the new "young turks" about the foibles and pitfalls of academe. Now *you* are one of the "old guard." Hopefully, you will not be negative or aloof with your new colleagues but will befriend them, perhaps becoming a mentor. And when you talk to them, be sure to tell them about the joys as well as the sorrows of professing.

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Notes

1. A copy of an annotated bibliography of the references for this paper is available upon request from Richard W. Thompson, Department of Psychology, Western Washington University, Bellingham, Washington 98225.

The Washington Center: A Grass Roots Approach to Faculty Development and Curricular Reform[1]

Barbara Leigh Smith

The Evergreen State College

Four years ago, an effort began in Washington State that dramatically altered our perceptions of what's possible in terms of revitalizing faculty and improving undergraduate education. It began modestly with two colleges working together; their efforts produced a model that became the foundation for a statewide consortium devoted to improving undergraduate education. Known as the "Washington Center for Improving the Quality in Undergraduate Education," the Center was conceived as a small scale, grass-roots-oriented effort emphasizing both faculty and curriculum development efforts. In just two years' time, the consortium tripled in size and was institutionalized with funding from the State Legislature. With headquarters at The Evergreen State College, it now serves 35 member institutions, both two-year and four-year colleges and universities and both public and independent institutions.

The story of the Washington Center raises important questions about our approaches to educational revitalization. It suggests that relatively low

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cost approaches are available to create more coherent curriculum and more vital academic communities.

This article provides a historical overview of the Washington Center, a description of its current structure and its crucial features, and an analysis of its implications for educational reform and faculty revitalization. We believe the Washington Center offers a promising low-cost high-yield approach to educational improvement that could work in any state or region.

Origins of the Washington Center

The Washington Center's beginnings reflect a combination of fortuitous circumstance and creative entrepreneurship. Its origins trace back to February 1984, when a dean at Seattle Central Community College introduced his Instructional Council to the curriculum at The Evergreen State College, a college noted for its interdisciplinary curriculum and collaborative teaching. After spending a day visiting classes, the members of the Seattle Central Instructional Council were enthusiastic about Evergreen's approach and hoped to initiate a similar program to revitalize the liberal arts. One week after visiting the Evergreen campus, Seattle Central's Dean Ron Hamburg called to ask whether he could send two of his faculty members to Evergreen for a term to gain additional expertise with team teaching in one of Evergreen's integrated programs. Though spring quarter was only a month away, this was quickly arranged. Valerie Bystrom and Jim Baenan spent the next ten weeks at Evergreen team teaching with Thad Curtz, an Evergreen veteran, in a program called "Thinking Straight," which included literature, informal reasoning, anthropology, and writing.

Based on their experience at Evergreen, Bystrom and Baenan returned to Seattle Central to initiate an interdisciplinary program there. To assist the program in its early stages, two Evergreen faculty joined them while two other Seattle Central faculty journeyed to Olympia to continue the faculty exchange. They were the first in a long series of exchange faculty who would establish steadily deepening relationships among a variety of different institutions and faculty in Washington.

The new program at Seattle Central provided students and faculty with the opportunity to explore the theme of individualism in America through an intensive fifteen credit program taught by four faculty combining work in political economy, history, anthropology, literature, and the arts. The program was an immediate success. Students experienced a heightened sense of engagement and commitment, and retention was high. The most surprising aspect of the effort, though, was its enormous impact on faculty.

It was immediately and abundantly apparent that we had stumbled onto a highly effective low cost model for *both* curricular reform and faculty revitalization. In fact, the initial Seattle Central-Evergreen collaboration proved so appealing that neighboring institutions quickly became interested. Word spread through friendship networks in the community college system and a number of faculty members at other campuses expressed interest in establishing similar curricular efforts. Faculty exchanges were arranged among the various Seattle community colleges and were instrumental in initiating new programs at Bellevue and North Seattle Community College. Lower Columbia College, far to the south, sent an exchange professor to Evergreen, and the University of Washington, Western Washington University, and Seattle University joined as well.

Fueled by a $50,000 grant from the Exxon Foundation to expand the model piloted through the Seattle Central-Evergreen relationship statewide, the Washington Center was launched with a half-time staff coordinator and modest funds for seeding projects, but interest was running so high, it quickly became apparent that we had a low cost model with large potential.

By the Spring of 1985 a growing constellation of institutions had come together to participate in the Washington Center. Although state funding was not provided initially, the State Legislature formally recognized the Washington Center in 1985 in the notes accompanying Evergreen's budget and other institutions were encouraged to participate. From 1985-1987, the Center's work continued to grow and prosper with the initial support from the Exxon Foundation and additional support from a $75,000 grant from the Ford Foundation. Ford saw the Washington Center as a model collaborative effort to build ties between two and four year colleges.

The Center's Structure and Administration

By 1987 the consortium tripled in size with 32 participating institutions and new model programs in place at more than a dozen colleges and universities. After an unprecedented show of inter-institutional support from all levels of the participating institutions, the State provided funding in July 1987 with an annual budget of $200,000. Half of these funds are pass-through funds to the member institutions to support a small seed grant program, faculty exchanges, travel, and seminars; the remaining funds support a small central staff of 2 1/4 at Evergreen. The Center's style and focus remains adamantly face-to-face, small-scale and centered on the development of new curricular approaches (called learning communities), the arrangement of faculty exchanges, and the encouragement of collaborative efforts at building curricular coherence.

The Center's success reflects an unmet need for community and collegiality and a hunger for a kind of authentic dialogue that is too rare in many of our institutions. Because we believe in the importance of community, we prize our first-hand, face-to-face relationships with key faculty and administrators in each of our member institutions. The Center's Assistant Director, Jean MacGregor, and I have built creatively on our previous professional contacts in Washington state and the Northwest: institutional committees, the Pacific Northwest Writing Consortium, intercollege networks as diverse as counselors associations, developmental education groups, environmental studies associations, and a statewide community development network. We see ourselves as networkers building linkages, both new linkages and linkages between existing organizations with inter-related interests around the common goal of improving undergraduate education.

We use a variety of approaches to maintain firsthand contact with our participating schools. Center planning meetings, conferences,and seminars are carefully rotated to various sites around the state. We publish a quarterly newsletter to build connections. The newsletter features notable efforts in undergraduate education throughout the state, describes who is taking part in faculty exchanges, and indicates where model programs are taking place. A planning committee, consisting of pairs of faculty and administrators from eight of the participating institutions, oversees the work of the Washington Center. On this committee as well as others, attempts are made to preserve a good balance of veterans and newcomers. To increase local ownership and involvement, we create short and long term committees comprised of faculty members and administrators to plan almost all our efforts and events.

We also travel extensively throughout the State to maintain personal contact with faculty members and administrators on each campus. At the end of each quarter, we conduct team de-briefings of the faculty teams teaching in the interdisciplinary programs to maintain firsthand contact with the faculty and the programs.

Since we see face-to-face relations as crucial to the Center's success, we are concerned about the increasing size of the organization, sometimes half-jokingly talking about being buried in our own success. We're exploring various models for retaining the Center's grass roots personal contact while building more localized leadership on participating campuses.

Crucial Features of the Model: Structural Reform

Two closely linked features define the Washington Center's approach to educational improvement: first, structural alteration of the educational environment into "learning communities" to enhance teaching and learning; and second, faculty exchanges into collaborative teaching situations. In this section we'll discuss structural change. The next section discusses the Washington Center's model of faculty exchanges.

A variety of different curricular models – all commonly referred to as "learning community" models – are being piloted by the colleges and universities associated with the Washington Center; these range from linked courses to the fully integrated coordinated studies program initiated at Seattle Central Community College and widely adopted at other institutions. "Learning community curricular designs" structure the educational environment to provide greater curricular coherence, a sense of purpose and group identity, more opportunities for active learning, and more intensive interaction between students and faculty. They redefine faculty roles and "encourage faculty members to relate to one another both as specialists and as educators...and help overcome the isolation of faculty members from one another and their students" (National Institute of Education, 1984). The faculty teaching in learning communities try to incorporate what is known about effective educational practice (See Chickering and Gamson, 1987 for a review of the principles underlying effective educational practice). All the model programs involve some degree of collaborative planning and teaching.

Interest in collaborative learning and learning communities is growing nationally. National visibility was heightened when the National Institute of Education's report, *Involvement in Learning,* recommended the establishment of learning communities as a means of developing a sense of purpose, reducing isolation of faculty and students, and encouraging integration in the curriculum. The Washington Center's work is related to a variety of other efforts in collaborative learning throughout the United States. For a discussion of a related group, Project CUE, Collaborative Undergraduate Education, see *The Forum on Liberal Education*, 1985; Esperian, Hill, and MacGregor (1986) review the federated learning community effort which is also comprised of kindred spirits.

The model used successfully for more than four years at Seattle Central directly replicates the Evergreen curricular approach. It is the model most typically used by Washington Center institutions. Instead of fulfilling general education requirements by taking a series of disciplinary courses, students in this model program enroll in an intensive 15 credit interdisciplinary program, called a "coordinated study program," for one or more quarters. This single program is the "full load" for both the faculty and students. The program typically enrolls 70-80 students; three or four faculty plan and teach the program together. The programs are thematic, and they cover a variety of different subject areas. Previous coordinated studies programs at Seattle Central include "The Making of Americans: Individualism" (political economy, art, literature, and history); "Power and the Person" (visual art, philosophy, music, literature); "Modern Thought, Images and Feeling: Europe 1900-1940" (philosophy, history, English, art history); and "Science Shakes the Foundations: Perspectives on Marx, Dickens, and Darwin" (political economy, English literature, biology, history). Although the programs typically began in the academic transfer divisions of the participating institutions, they quickly spread to developmental and vocational areas.

Conceiving of general education in terms of cultivating students' integrative abilities, the emphasis in these programs is on developing students' analytical and synoptic skills and their capacity to deal with complex issues from a multi-disciplinary point of view. Since these programs always include extensive work in written and oral communication, they frequently fulfill requirements in composition. Though they are somewhat more expensive than the "average" community college course at the freshman level, retention is high. Preliminary information on the students' level of cognitive development suggests that the coordinated studies programs are highly effective in fostering higher order thinking (MacGregor, 1987).

The Washington Center's success is partly due to its stress on a variety of curricular alternatives and the importance of local adaptations. We emphasize that there are multiple curricular designs for building curricular coherence and integration, and continually draw on the growing local and national network of learning community models to present a large menu of design possibilities. The Center's participating institutions have responded just as we'd hoped, by designing their own local adaptations. At Shoreline Community College, for example, writing and critical reasoning across the curriculum is a major focus and much of the effort is directed at linking composition and content courses. At Eastern Washington University, the University of Washington, and Western Washington University, the search for a more coherent approach to curriculum is being pursued through "freshmen interest groups," an approach that encourages students to register for thematically clustered courses.

To support these efforts, the Center collects and disseminates information about promising approaches throughout the United States and conducts quarterly seminars on various topics relating to the improvement of undergraduate education, such as active approaches to learning, writing across the curriculum, and similar themes. News of these curricular approaches doesn't just flow *from* the Washington Center; the participating institutions now frequently share perspectives directly. Inter-institutional faculty exchanges are one of the Center's most powerful means of developing new curricula and promoting the transfer of knowledge between faculty members.

Crucial Features of the Model: Faculty Exchanges as a Vehicle for Curricular Transformation

The Washington Center acts as a statewide broker for inter-institutional faculty exchanges. Unlike most faculty exchange programs, the Washington Center's exchanges are not viewed simply as opportunities for faculty members to teach their usual courses in another institutional setting. Instead, the exchange program complements and extends the Center's curricular reform effort by placing exchange faculty, wherever possible, into team teaching situations in new model programs. The exchange program thereby amplifies the process of educational reform and the transfer of knowledge between individuals and institutions as newcomers learn from veterans and take it back to their home institutions.

Teams often include one exchange faculty member from another institution, one veteran from a previous learning community program, and two newcomers to collaborative teaching. Many of the institutions try to rotate various faculty members through the programs to broaden the impact on the institution as a whole, but a balance of newcomers and relatively experienced faculty members is also important to the programs' success.

The Washington Center brokers these inter-institutional teaching exchanges and provides a small housing stipend if relocation is necessary. No additional costs are incurred if the exchange is a reciprocal one. Since the exchange is typically into a team taught collaborative program, it usually isn't necessary to find exchange professors who are disciplinary equivalents – often an obstacle to conventional faculty exchange programs. If a reciprocal exchange can't be arranged, the Center makes a small ($3000-$5000 per quarter) contribution towards replacement costs. In arranging the exchanges, paperwork and red tape are purposely kept to a minimum. At most of the participating institutions, both the deans and division chairs actively support the exchange program and are highly responsive to faculty interests. By June 1989 we estimate that more than 160 faculty in a dozen institutions will have been involved with the Washington Center faculty exchange effort – either as actual exchange faculty or team teaching with a visitor from another school.

Exchanges as a Vehicle for Inter-Institutional Community

Inter-institutional faculty exchanges in collaborative teaching settings have their own dynamics, in terms of both possible obstacles and rewards. In addition to the usual boundaries that separate faculty within an institution – departmental, historical, spatial, etc. – there are often substantial institutional boundaries within a state's higher education system relating to status, priorities, institutional culture, location, and resources. Especially pronounced are perceived differences between two and four year institutions and the private and public sector. Too often, as we squabble for status and resources, our differences capture our attention more than our commonalities and shared concerns. Indeed, this competitive pattern of thinking is so well entrenched that during the Washington Center's earliest days, we were often greeted with disbelief at the apparent act of altruism the organization represented!

Many faculty members report an initial sense of anxiety about entering a new institution, especially if it is a different type of setting than their home campus. Teaching in front of ones' colleagues is also disquieting at first, but most participants quickly find that team teaching provides an important social and intellectual base from which to experience the new community without suffering the isolation of being a newcomer and an outsider. Exchange faculty say it is an enormously important learning experience for them, often more stimulating than a sabbatical. Most leave the exchange relationship with a new sense that the higher education system is, in fact, one educational community with many shared interests. The relationships among new-found inter-institutional colleagues usually persist beyond the term of the exchange itself, as a growing circle of faculty and administrators continue to interact through quarterly conferences, seminars and the annual statewide curriculum planning retreat that the Washington Center organizes and sponsors.

Implications for Faculty Development

Collaborative teaching and inter-institutional exchanges clearly offer great rewards to many people. In many institutions, there is little faculty interaction across departmental boundaries; reward systems, spatial assignments, curricular patterns, and time schedules combine to make faculty interaction, especially around pedagogical or intellectual ideas, rare if not nonexistent. Collaborative teaching can be powerful in bringing people together who were previously only passing acquaintances. Faculty generally report that the experience substantially alters their subsequent patterns of collegial interaction and gives them an enhanced sense of camaraderie and respect for one another. These new efforts are also powerful in terms of building collaboration and new rapport within institutions between faculty and administrators as they work together to try and adopt new approaches.

Our positive experience with faculty exchanges and collaborative teaching offers a suggestive contrast to the current literature which paints a discouraging portrait of the nation's faculty (Seidman, 1985; Boyer, 1987; Bowen and Schuster, 1987). This contrast offers important insights into alternative ways to improve undergraduate education and promote faculty vitality.

Our experience suggests that some of the simplest approaches to maintaining the intellectual vitality of our faculty are often overlooked. While improving the material conditions of our work may be necessary, it certainly won't be enough. Finding opportunities and institutional structures that empower individuals and allow them to continue to learn and re-create is also vitally important. Simply providing creative opportunities and structures to work together is apparently one of the keys.

A recent book on decision-making by Todd Sloan is suggestive in thinking about the dynamics of maintaining faculty and institutional vitality. He stresses the *social* dimensions of life's choice making and the importance of understanding the context of the individual (Sloan, 1987). Sloan points out that all of us experience everyday life as a structure with great continuity because of the regularity in the contexts and the relationships we encounter. We often come to "frame" or see our life choices as more limited than they are, in fact; the regularity of the overall structure and situation reinforces this limiting conception. Perhaps because of its unusual boundary crossing capacity, the Washington Center program seems to have a peculiar ability to encourage people and institutions to "break frame."

The repetitiveness and mind-deadening redundancy many experience in their work is a major problem in higher education; it is a hidden disease slowly eating away at faculty vitality in many of our institutions. One faculty member told us with great precision that she will face 125 sections of English 101-102 before retirement; another can precisely forecast the number of freshman essays she has left to read. In a reflective autobiographical essay, another wrote about his fear that he "..is becoming the kind of faculty member that administrators shudder at getting stuck with; the kind that he himself shudders at getting stuck with."

Many of the people with whom we work also describe their work and their institutional relations as reaching a certain "plateau" after a number of years; this plateau often became a ceiling on their subsequent relationships and aspirations. This ceiling takes many different forms. It defines what we teach and how. It defines roles and relationships – between departments, among faculty colleagues, and relationships with administrators. Most importantly, this ceiling defines what is possible and what isn't possible. It removes many of the surprises and puzzles from everyday life.

Faculty exchanges and collaborative teaching provide important opportunities for "re-framing" simply by altering the routine work environment and social relations in substantial ways.

The social context is dramatically re-defined by collaborative teaching and cross-institutional work and new conceptions of the educational community are created. Collaborative teaching, especially across institutional boundaries, disrupts old patterns and expectations. It presents genuine puzzles and new situations. In doing so, we also become more aware of the unproductive routines we often fall into. In Sloan's terms, the experience allows us to "re-frame" our work and our institutional relationships. One of the members of our Planning Committee put this in a slightly different way: he suggested that the Washington Center works quite simply because it turns teachers (and administrators) back into learners.

It is probably significant that faculty exchanges and collaborative teaching are of special interest to mid-career faculty, who have achieved institutional security and are often highly skilled teachers. These faculty have many talents, commitments, and needs that are ignored in our institutions and largely unexplored in the current literature on faculty development.

Mid-career faculty are at a stage when they need new challenges. "When you reach a certain level of proficiency," one of them recently said, "you get kind of afraid that you are losing your edge if you don't see new challenges." Our experience also suggests that mid-career faculty are ready and eager to make more substantial commitments to long term institutional improvement. After seeing their joy and eagerness in assuming more leadership, we wonder why it hasn't happened sooner! Perhaps institutions underestimate this interest and willingness because they assume that faculty commitments are largely to national discipline-based cultures and associations. While these national affiliations are certainly important, they don't provide the day-to-day sustenance that a more local institutional culture and sense of community provides. Faculty may, in fact, turn to national associations in desperation because the local culture does not provide a sense of community and commitment.

Our experience compels us to think more broadly about institutional roles and what we mean by leadership. When college communities think of leadership, it is usually in terms of administrative leadership and in a single institutional setting. We seldom think in terms of leadership in the classroom. We almost never think of it across institutions. Team teaching gives mid-career faculty the opportunity to serve as mentors and leaders in the most useful possible place – the classroom itself.

Perhaps the most important aspect of collaborative teaching for both junior and senior faculty is the fact that the new model curricula put the teaching faculty totally in charge of their teaching, in terms of both content and structure. They are jointly empowered to create something new that is substantively and pedagogically sound and stimulating. Equally important, the process of designing and delivering this curriculum entails risk-taking, and it is public and collegial. It is not subject to the committee "brokering" that frequently attends and undermines meaningful curricular reform efforts. The attractiveness of the opportunity to create a more emergent curriculum can perhaps be fully appreciated only when it is contrasted with the redundancy of much college teaching (especially in community colleges too often narrowly circumscribed by transfer agreements), the loneliness and isolation many faculty apparently feel, and the bureaucratization in many institutions that has undermined people's sense of personal power and their sense of community.

This more emergent approach to curriculum requires trust in the good judgment of the participating faculty members, and perhaps this act of trust also accounts for the success of the new collaborative programs and the Washington Center. In our experience, this trust has not been abused. Generally speaking, educators want to teach something worthwhile, that they themselves find interesting. They have a conception of what this should be. Working with faculty in other disciplines provides a new challenge that in no way replicates the curriculum committee process of "assembling" a general education curriculum. After watching general education committees struggle for years to make relatively minor reforms, it is surprising to see how quickly a team of four good faculty will come up with an exciting and substantive general education program for a quarter-or year-long program. Inter-institutional transfer of these interdisciplinary programs is not usually a problem. Most states and institutions allow considerable flexibility in their transfer policies and general education programs, and the new coordinated studies program can easily fit within most general guidelines. Even in states with very restrictive policies, integrated programs have been developed. The Quanta program at Daytona Beach Community College is a good example of creatively building an interdisciplinary learning community type program within rigorous state requirements about transfer and the Associate of Arts degree.

A Grass Roots Model for Reform

Our four-year history with this collaborative effort has led us to "reframe" our own thinking, as well, about curricular reform and faculty development. Our experience suggests that it's possible to create local cross institutional professional communities focused on improving undergraduate education. This model offers a promising and relatively low-cost approach to faculty revitalization and to exploring models for curricular reform. It has opened up a productive dialogue about undergraduate education within and among our institutions that extends considerably beyond the learning community model programs themselves. By providing structures and opportunities for bringing people together, the Washington Center hopes to encourage statewide interest in improving undergraduate education. To a remarkable extent, it has been successful in doing this, and faculty and administrators have found a new sense of common enterprise by joining hands in this effort. We have done this by operating from the assumptions that, despite our differences, we are one educational community with many overlapping interests and concerns, that we can make substantial accomplishments together that we cannot make alone, and that small scale, grass roots and collaborative approaches are the best places to begin.

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Part IV EMERGING CONTEXTS FOR DEVELOPMENT

As interest in teaching excellence grows, POD members find themselves called upon to assist in the training and support of academic professionals in a variety of roles. Here we report on three areas of practice that are relatively new in the field.

Nancy Chism shares here thoughts on facilitating TA training programs with an article probing the conditions for successful collaboration with departmental personnel responsible for TA supervision. Myra Wilhite and Anita Leininger report on a study of the practices used to promote faculty growth by chairs whose colleagues have identified them as excellent. The report provides a "profile" of the ideal supportive, reasonable chair. In the last piece, Len Ainsworth describes a participative approach to planning and developing management training programs for academic professionals. All three articles illustrate the benefits of supportive conversation and collaborative planning in effective professional development practice two central organizing principles and recurring themes in the history of the POD network.

Collaborating with Departmental TA Coordinators: The Next Step?

Nancy Chism

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The first round in the battle to prepare graduate teaching assistants (TAs) for teaching has been won. At campuses throughout the nation, administrators are finally acknowledging that a large proportion of undergraduate instruction is being delivered by TAs who have little prior preparation for their role of teacher. What's more, funds and support for TA training programs are becoming available in places where these needs were never acknowledged before.

Many institutions have established new programs for TA development. These programs typically consist of a campuswide TA orientation, usually held just before the academic year and lasting from less than a day to two weeks. The components of these programs often include: a general orientation to the TA role and to policies and practices of the university; a tour – often a whirlwind tour – of the world of pedagogy (designing a course syllabus, preparing lectures, leading discussions, testing and grading, using audiovisual aids); a chance to do some microteaching or receive some teaching feedback; and an introduction to university services that may help instructors as they teach. International TAs often receive separate or additional training in language, the culture of the American classroom, and pedagogy.

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The programs are generally well received. Evaluations usually show that the teaching assistants feel more knowledgeable and less anxious about their roles. Faculty and administrators feel that they have addressed the issue. Good materials have been developed. The climate for support of TA preparation on the campus has improved.

Centralized orientation programs serve very important purposes they build *esprit de corps* and raise the level of awareness about pedagogical issues. In addition, they are efficient and draw on the talents of those who have a more extensive background in pedagogical training than is normally available in university departments.

However, it is the thesis here that it is unwise to place exclusive or even extensive attention on TA orientation programs as vehicles for TA development. Faculty developers who have a sense of how one grows as a teacher and educational researchers familiar with the term "weak treatment" would readily concede that such orientation programs are unlikely to have a significant long-term impact on the teaching performance of TAs. They are only a beginning, a small part of what it takes to help TAs develop as teachers. This paper will discuss the disadvantages of sole reliance on a centralized TA orientation program, and propose that establishing collaborative relationships with departmental TA coordinators is a more fruitful approach, particularly on large campuses.

The Disadvantages of Sole Reliance on a TA Orientation Program

There are three main disadvantages to relying solely on a centralized orientation program as a vehicle for TA development. First, recent literature on teacher development and on the development of professionals emphasizes that most growth occurs "on the job" (Feiman-Nemser, 1983). The growth in popularity of field experiences, induction year programs, and mentoring in teacher education testify to this belief. While theory, frameworks, and orientation can be helpful in advance, the major opportunities for the development of teachers arise when they are engaged in teaching. The puzzles that prompt examination of one's prior beliefs and actions and that call for experimentation and evaluation of teaching practices are embedded in action. Programs that are isolated in time and context from these occasions for growth do not supply the challenge and support needed at the specific time and in the specific context where growth is most likely to occur. TAs need assistance throughout the academic year when and where they are teaching.

Secondly, there are pitfalls involved in investing major resources in a centralized orientation. As many faculty developers are noting, departments and administrators tend to think that the existence of a successful orientation relieves them of further responsibility and effort. Furthermore, centralized programs may result in failure of the departments to take ownership in the efforts, possible lack of fit between the centralized program and departmental efforts and needs, potential lack of continuity, difficulties in reaching TAs and getting their participation, possible lack of credibility, and difficulties in institutionalizing such efforts (Smock and Menges, 1985; Loeher, 1987).

Finally, centralized orientations must be "generic." Even though many centralized orientations involve faculty presenters from various disciplines, the orientations do in fact rest by necessity on a generic approach since participants from many unrelated disciplines receive common pedagogical training. For example, TAs in performance areas, such as music, theater or physical education, often complain that sessions on student assessment address only written tests. Students who will assist in an architectural studio find themselves placed in sessions on lab/studio instruction where the major focus is on procedures, equipment, and safety rather than aesthetic critique. It is difficult for a campuswide orientation to provide for such discipline-specific differences.

The Next Step

Clearly, the second wave in TA development will entail continuing initial orientation activities but moving beyond these to approaches that will complement the centralized orientation program and extend its impact throughout the academic year. The logical step seems to be for faculty developers to develop partnerships with the people who are responsible for and proximate to TAs as they teach – the departmental TA coordinators.

Working with TA coordinators in departments is an approach that holds promise in several respects: it addresses the need to locate developmental support and challenge within the context of actual teaching activity where most growth can occur; it places ownership for TA development jointly in departments and in a centralized faculty development office; it combines the general pedagogical expertise of a faculty developer with the discipline-specific knowledge of a departmental supervisor; and it increases the number of people working on TA development.

Departmental TA coordinators can bring to this collaboration such strengths as discipline-based knowledge, experience with the particulars of the courses that the TAs are teaching, a supervisory role, and proximity and continual access to TAs. The main strengths that the faculty developer can contribute to the relationship are a) understanding of teaching skills and knowledge and b) experience and expertise in developing these skills and knowledge bases in practicing or prospective teachers in higher education. The faculty developer can not only help provide substantive knowledge of teaching, but can advise the coordinator on effective ways of helping TAs to develop this knowledge.

There are several practical contributions that faculty developers can make in collaborations with TA coordinators:

Create awareness and collegial support for the departmental TA coordinator role as faculty developer. Immersed in their responsibilities for assigning TAs to classes, handling complaints, and coordinating courses, TA coordinators often fail to attend to the potential role they can play as mentors and developers of future college teachers. Through sharing literature and ideas on faculty development and inviting groups of departmental TA coordinators to gather and trade insights on effective practices, faculty developers can work toward creating a collegiality and enthusiasm for this role that may revitalize themselves as well as the department coordinator.

Share pedagogical knowledge. Like the TAs they oversee, most TA coordinators began teaching without prior preparation and without support as they learned to teach. They often quite openly claim that they do not know how to advise TAs about teaching and that the process of teacher development is quite mysterious to them. Many do not have resource materials on teaching and are unfamiliar with sources and techniques in the field of college teaching. They do, however, possess invaluable experiential knowledge and knowledge of their disciplines that can complement the skills and knowledge of developers in collaborative arrangements. The faculty developer can work to increase the pedagogical knowledge base of department coordinators and collaboratively, the team can make applications to teaching in particular disciplines.

Help with program design and implementation. Faculty developers can draw on their experience to assist TA coordinators to design a program that is appropriate for their TAs by contributing needs assessment techniques, program models, and program evaluation methods. In addition, faculty developers are often in a good position to serve as resource people for specific seminars or workshops that may be a part of the program design, or to recommend resource people.

Supply print and audiovisual resources. Most faculty developers have an extensive knowledge of literature on college teaching and a collection of readings and handouts that are ideal for specific needs. They also know about videotapes, films, and other audiovisual resources that can help in teacher development. Sharing this knowledge and material with TA coordinators is an ideal way in which faculty developers can assist.

Help provide teaching feedback. An essential part of most faculty developers' work is the provision of opportunities for feedback on teaching, opportunities that are central to teacher growth. Developers can familiarize TA coordinators with the range of feedback options available, from written student evaluations to class interviews to classroom observation and videotaping. They might supply coordinators with a variety of print instruments that can be used in classroom observation or teaching evaluation. They might also, depending on their resources, offer to provide videotaping services or facilitators for class interviews.

The Problems

In order to work toward establishing collaborative networks between faculty developers and departmental TA coordinators, several problems must be anticipated. The first is frequent lack of departmental coordination. In some departments, responsibilities for TA supervision have never been assigned or have been loosely delegated among several people, who may or may not be aware that they have TA supervisory responsibilities. There are often tiers of coordinators: a department TA coordinator, course coordinators, and faculty who teach particular sections of large courses. When this situation exists, it is extremely difficult for a faculty developer to locate the appropriate people for establishing a collaborative arrangement. At some campuses, this problem is addressed by an administrative requirement that each department annually identify the name of its chief TA coordinator.

Even when a coordinator is clearly specified, a second problemlow status of the coordinatoroften arises. Increasingly, responsibilities for undergraduate instruction and TA coordination are being assigned to the "new faculty member on the block," the veteran faculty member known as a teaching workhorse, or others of low status. The "paraprofessionalization" of these courses and responsibilities also seems to be becoming a phenomenon – non-tenure track faculty, senior TAs, or administrative assistants with or without disciplinary expertise are in charge in an increasing number of settings. While these people may be very competent and may be able to devote more time and energy to the tasks than experienced faculty, their status makes it difficult for them to command resources and influence departmental and university policies. The faculty developer who wishes to collaborate with the TA coordinator finds that little leverage for change in the department is available when the status of the coordinator is low.

Time is an additional problem. For TA coordinators who are full-time faculty, and often for TA coordinators without faculty status, time is rarely available to address responsibilities for TA coordination adequately. The pressing management responsibilities of large course instruction often prevent them from devoting time to TA development or taking a mentoring interest in the growth of TAs as teachers. In places where there are large numbers of TAs, departmental TA coordinators sometimes receive a reduction in course load (typically release from one course), but are often responsible for the coordination of as many as 30 or 50 TAs in exchange for this release. The pressures to pursue research and publication and to serve on university committees or perform other service obligations are intense, leaving little time available to give TA coordination the attention it deserves. Consequently, coordinators are often more than willing to delegate TA training to centralized faculty developers. Faculty developers, faced with their own time constraints, may find it easier to repeat a standard workshop or distribute general materials than to establish collaboration with a beleaguered TA coordinator.

An organizational problem on most campuses is lack of accountability for TA development. Although external pressures appear to be growing, departments have not before now had strong expectations held before them for preparing teaching assistants well. Rather than developing and supporting strong mechanisms for continuing TA development, most departments have focused on a narrow interpretation of coordination tasks, such as making sure TAs report to class, hand in grades on time, and the like. Rarely have university administrators asked for more than business as usual and the occasional extinguishing of brush fires involving TAs. Some universities are beginning to require that departments submit TA development plans or a record of activities, but faculty developers seeking the energy and commitment that they themselves bring to the work of faculty development will often be frustrated by the low commitment of most departments, due in part to an absence of pressure for accountability.

Distrust of faculty development is often the deeper problem involved. As Hans Mauksch points out in several of his works (1980, 1987), many faculty development efforts are thwarted by deep-seated beliefs about teaching that argue against the potential effectiveness of development activities. Among these are the feelings that teachers are born, not made; that teaching techniques are mere "gimmickry" compared with content knowledge; that attention to one's teaching will not be rewarded and may even be suspect; that teaching is private and should not be discussed or interfered with; and that effective teaching cannot be defined and evaluated. The faculty developer seeking to work collaboratively with departmental TA coordinators often has to confront these beliefs and convince the coordinators that their efforts can influence the teaching growth of the TAs under their coordination.

Making It Work

Although the potential problems are formidable and perhaps overwhelming at first, the advantages of working with TA coordinators and the attendant promise of more extensive and long-term impact outweigh these problems. Collaboration of this type is not entirely novel. Many departments at universities throughout the country already offer strong programs that involve weekly seminars, extensive clinical experiences, and frequent opportunities for feedback and consultation. Often, these programs are independent of the faculty development office, but sometimes they are linked. The University of Washington's program, as described by Nyquist and Wulff (1987), is based on a decentralized model that emphasizes collaboration between departmental coordinators and the faculty development office, and several other large universities combine the offering of a centralized orientation with continued service to specific departments through the academic year. The next step, then, is to extend and strengthen faculty developer-TA coordinator collaboration on campuses where it exists and to introduce it as a second phase on campuses where a centralized orientation is the only extensive effort underway presently.

A key priority in establishing collaborative networks is gaining administrative support for the effort. At several institutions, central administrators are asking departments to report annually on their efforts to prepare TAs for their teaching roles. This requirement could be more powerful if a faculty or TA committee were appointed to review the accuracy of the claims, judge the adequacy of the effort, and make recommendations for changes in the programs. Departments with exemplary programs could receive awards or additional resources and be urged to share their approach at meetings convened for department TA coordinators. This administrative pressure would have to be sustained with parallel efforts at the department level. Department chairs and head TA coordinators would have to create a climate of support and mechanisms for accountability where TA development is involved. Reporting successful efforts at other campuses to key administrators (the "keeping up with the Joneses" tactic) and enlisting the support of the graduate student association are two strategies that faculty developers can employ to get administrative support.

Extending the inroads begun by centralized orientation programs to provide ongoing developmental support as TAs progress through their initial teaching experiences is indeed an ambitious effort. Those who are exhausted from their recently won campaigns to get support for an orientation program may even find the suggestion frustrating. There is an advantage, however, in maintaining existing momentum and pressing on to achieve a crucial goalthe goal of providing all TAs with adequate support at the beginning of their work as teachers in higher education.

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Practices Used by Excellent Department Chairs to Enhance the Growth and Development of Faculty

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A college or university is only as good as its faculty. As Dressel (1981) writes, "The major work of the university is done by the faculty...and coordinated by administrative sources" (p. 27). Indeed, the faculty together with academic department heads in particular, are key to the successful operation of the university. Given the importance of faculty within the institution, their development and continued productivity becomes critical to the vitality of the university. Faculty development programs present institutions of higher education with opportunities to keep faculty current and to build excellence from within. One promising and economical approach to faculty development builds on the current institutional structure by working through first-line managers in higher education, the academic department chairperson. If, as Dressel suggests, most faculty find that their immediate concerns and involvement in the institution are through their departments, then department heads are in a particularly pivotal position to encourage, support, and recognize growth and development activities of their faculty.

The purpose of this study was to identify behaviors and practices used by academic department chairpersons to enhance the professional growth and development of faculty and to describe the conditions which affect

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these behaviors. While department heads acknowledge their responsibility for the enhancement of faculty growth and development, they are sometimes poorly prepared to assume this role (Boice, 1985). Most department chairs are promoted to these positions through the academic ranks with little or no leadership training and without a clear understanding of the skills of managing and facilitating the growth of faculty and staff. Knight and Holen contend that this inexperience "...intensifies the need for information concerning the behavior characteristics of department chairpersons who are perceived to be effective" (1985, p. 685).

Most investigators, while acknowledging the development of faculty as a legitimate function of the department head (Bragg, 1980; McLaughlin, Montgomery & Malpass, 1975; Smart & Elton, 1976) and even a preferred role (McLaughlin, et al., 1975), have limited their discussions to the identification of roles rather than an examination of specific behaviors. Tucker (1984) and Bennett (1983), for example, described the roles, functions, and responsibilities of department chairpersons based on data collected from over 1,000 administrators since 1980. Other investigators have studied the complexity of the role (Bragg, 1980; McLaughlin, et al., 1981; Smart & Elton, 1976) with emphasis on the technical functions (e.g., budgeting, scheduling) rather than on the human resource functions (e.g., leadership, personnel and program planning, problem-solving). Wheeler, Creswell, Mitchell & Seagren (1986) described the roles and activities used by outstanding department heads to assist faculty growth and development. The researchers concluded that the chairpersons have little or no training for the roles identified.

These studies suggest that while numerous roles and functions of the academic department chairperson have been identified, there is more written about the technical functions than the human resource functions. In addition, studies identifying specific behaviors used by department heads are limited. What is needed is more research on the "practical dimensions" of the position (Tucker, 1984) with major emphasis on the identification of "behavior characteristics" of effective department chairs (Knight & Holen, 1985). This study attempts to meet that need by identifying specific behaviors and practices used by effective department chairs to assist faculty professionally.

Research Questions

Given that the development of faculty is seen as a legitimate function of the department head (Bragg, 1980; McLaughlin, Montgomery, & Malpass, 1975), that department heads are poorly prepared to assume this role (Knight & Holen, 1985), and that past studies have limited their discussions to the identification of roles, functions, and responsibilities, (Wheeler, Creswell, Mitchell, & Seagren, 1986; Bragg, 1981), this study focuses on behaviors used by academic department chairpersons to enhance the professional growth and development of faculty and describes conditions which affect these behaviors. The study also identifies sources of information which helped chairpersons arrive at these behaviors, satisfactions and dissatisfactions of chairs with their role, and advice chairpersons would give to new chairs.

Method

Participants

Thirty male academic department chairpersons from ten North Central Region Land-Grant Colleges of Agriculture participated in this study. College of Agriculture deans and chairpersons from each of the 10 institutions identified three chairs who had excelled at assisting faculty professionally. Chairpersons whose names appeared most often on the lists were selected for telephone interviewing. Deans and chairs at the ten participating colleges identified sixty-one chairpersons. The number identified at each college ranged from four to ten. Of the thirty chairpersons selected for interviewing, twenty-three were identified by both deans and chairpersons. The remaining seven were identified only by chairs.

Instrument

Some explanation regarding the structure of the telephone interview is warranted at this point. The two principal styles of interviews are the structured or standardized interview and the unstructured or nonstandardized interview. The structured interview may be sub-divided into "scheduled" and "nonscheduled" interviews. In the scheduled structured interview, the interviewer reads the questions exactly as they are worded and in the order presented in the interview schedule. In the nonscheduled structured interview, the interviewer is afforded choices as to order and wording of quesitons (Assael & Eastback, 1966; Janofsky, 1971; Kegeles, 1969). A nonscheduled structured interview schedule was developed for this study. The validity and reliability of the interview schedule were tested in a pilot study using six chairpersons, three from one midwestern university and three from one eastern university.

The interview schedule consisted of 20 questions in 6 sections. Questions in the first section asked for background information. The second section sought behaviors used by the chairs to assist faculty professionally. Other sections of the instrument consisted of questions about conditions which could influence the way chairs assist faculty, methods used to develop administrative skills, information sources, satisfactions and dissatisfactions with their role as chairpersons, and finally, advice they would give new department heads about assisting faculty professionally.

Procedure

Data were collected through telephone interviews of the thirty department chairpersons. Prior to the interview, the chairpersons were sent an introductory letter describing the purpose of the project, the topic to be covered, and various issues that would be discussed. In addition, they were told the process by which they were selected, the length of time required for the interview, and when to expect the interviewer's call.

The specific method of data analysis for this study was suggested by qualitative methods of interview interpretation (Guba & Lincoln, 1981; Wolf, 1979) and included: (1) tape recording and transcribing each interview; (2) sorting the interviews for issues, concerns, and factual information; (3) designating the coding unit as the entire interview due to the overlap of responses offered to questions; (4) formulating response categories for content analysis of the interviews; (5) testing the coding instrument for intercoder reliability; and (6) presenting the interview responses as they related to each research question.

Results

Preliminary Information about Chairpersons

Chairpersons selected for interviewing headed departments ranging in size from 11 to 69 members with a mean of 30 members. The chairs had served from two to 26 years. Forty-three percent reported prior administrative experience, most commonly serving as department head, program head, or research project director. Thirty percent of the department heads had gained administrative experience in a field other than education.

Job Satisfaction

In spite of various frustrations associated with the role of academic department head, e.g., ambiguity of the position, inability to motivate faculty, proliferation of paperwork, and fear of becoming professionally obsolete, chairs were generally satisfied in their role as first-line administrators. Over 75 percent of the department heads cited "accomplishments of faculty" as a major source of satisfaction. "Hiring outstanding faculty," "building a department of national reputation," and "the turnaround of troubled faculty" were also viewed as major job satisfiers providing most chairs sufficient motivation to continue in their role.

Reported Preparation for Chair Role

Besides observing and interacting with department heads, chairpersons reported using various methods and sources of training and development for their role in assisting the growth and development of faculty: (1) journals, books, and newsletters; (2) workshops, courses, and conferences; (3) on the job training; and (4) trial and error. All chairpersons recognized the need for training. Several, however, complained of too little time for formal development activities.

Conditions Influencing Chairperson Behaviors

One factor that was cited by most chairs as influencing the way in which they assist faculty was the declining resource base. One department head commented that "money has not been there to bring in the young faculty that we need for our vitality as a department." Additionally, diminishing resources were viewed as challenging the authority of the department head as exemplified by the comment, "in times of contracting resources, the decision- making and the activity of those in the central administration becomes greater." Finally, several chairs concluded that the declining resource base had forced them to assume a more active role in fund raising just to keep their departments and faculty competitive.

Behaviors and Practices Used for Faculty Development

Three questions provided the framework for the organization of the behaviors and practices chairpersons use to enhance faculty growth and development. First, participants were asked to focus on one faculty member who had grown professionally over the last few years and then to identify how they had assisted this faculty member. Second, the department heads were asked to describe behaviors used with the whole department.

Finally, the chairs were asked what advice they would give a new department head on how to assist faculty professionally.

An emerging pattern of behavior was identified commencing with the establishment of the appropriate departmental climate: a "supportive, open environment" marked by "honesty and openness" on the part of the department chairperson. The pattern of ongoing behaviors identifed by chairs is one that supports the "movers," reduces the number and magnitude of faculty problems, and fosters early detection of problems that do occur. Respondents offered numerous other recommendations which were sorted into the following six categories (Table 1): recruitment, com-

TABLE 1

FRAMEWORK	BEHAVIORS
Recruitment	• Hire faculty with excellent skills
Communication	• Establish open door policy • Interact frequently, expecially • Discuss problems • Manage by walking around, visit offices and labs often • Demonstrate a personal interest in faculty research and other actvities • Inform faculty of important administrative issues • Schedule regular planning meetings or retreats
Goals Identification	• Develop and communicate reasonable expectations • Prepare departmental goals with faculty • Encourage faculty to identify short- and long-term goals • Help faculty to identify area of expertise • Counsel, encourage faculty to take training courses, etc. • Treat faculty as individuals
Support	• Encourage creativity, establish necessary environment • Encourage faculty participation in campus activities and committees • Encourage faculty interaction with appropriate peer groups at local, regional, and national level • Help identify funding sources for faculty • Assist faculty in grant proposal preparation • Expect faculty to obtain grant funds • Provide support for research program

Table 1, continued.

FRANE	BEHAVIORS
Support (cont.)	Encourage international opportunities and expect participation
	Support travel to professional meetings
	Encourage and expect participation in professional societies
	Encourage sabbaticals and faculty development leaves
	Stress team concept with faculty
	Appoint a mentor for new faculty
	Guard faculty time, eliminate trivia
	Show confidence in faculty by accepting advice and recommendations
	Take faculty from "where they are" versus "remolding"
	Advocate for faculty accomplishments, needs, and concerns
Evaluation/ Intervention	Conduct regorous and comprehensive annual evaluations
	Provide continuous feedback to faculty on their performance
	Use peers to review faculty performance
	Conduct exit interview with students on faculty performance
	Use positive reinforcement
	Set timetable for faculty to accomplish goals
	Use shifts in work assignments to challenge faculty
	Change appointment or counsel faculty out of appointment
	Adjust base salary for inequities
	Use salary to reward and motivate
	Give zero salary increases for unproductive faculty
Recognition	Compliment faculty, write letters of appreciation to faculty with copy to administrators
	Promote early
	Appoint to "select" committees
	Nominate for awards
	Publicize faculty achievement to university, state, and nation
	Reward teaching, research, and extension on an equal basis

munication, identification of goals, support, evaluation, and recognition. A discussion of each of these behaviors follows.

Recruitment. Recruitment was viewed by chairpersons as a major deterrent to faculty problems, an opportunity to establish new directions in the department, and a chance to bolster faculty morale. One department head commented:

> The first thing is, of course, hiring the right people. To me that's a high priority of the job. Because people make the department and if you don't hire the best people you're not going to have the best department.

Eighty-six percent of the respondents indicated that they had hired faculty during their administrative tenure and emphasized the importance of recruiting "top personnel."

Communication. In addition to "hiring the best," "getting to know your faculty" was cited by the thirty department heads in this study as fundamental in assisting the growth and development of faculty. Chairs are proactive in this two-way communication process. Several specific behaviors were identified as being particularly important when communicating with faculty. A thorough orientation process for new faculty can set the stage for further communication between faculty and chairs. While formal communication methods such as faculty meetings, newsletters, memos, and retreats are useful ways to regularly communicate with faculty, an open door policy which permits informal but frequent interaction is also very useful. Many times an incipient crisis can be stopped before it can cause a major problem by the use of any or all of the above behaviors. Of equal importance is the annual evaluation at the end of each year. This evaluation can be particularly meaningful if there is input by both the chairperson doing the evaluating and the staff person being evaluated.

Frequent communication between department head and faculty was viewed as critical to the growth and development of faculty and was facilitated by the chairpersons.

Identification of Goals. Department heads considered goal identification as another important development tool. Helping faculty identify goals, assess opportunities, and set departmental direction was cited by respondents as a major responsibility of department heads and critical to the professional development of faculty. The job description was viewed as integral in this goal identification process. One department head commented:

> The best thing you can do for anybody in any job is to define the job description completely the duties, the expectations, and the methods that you're going to use to evaluate that person's performance. If you don't do that I think anything else that you do is pretty much cosmetic.

Eighty-four percent of the chairs indicated that they give new faculty more individual attention due, in part, to the rigorous promotion and tenure evaluation. Department heads met with new faculty as often as needed to assist in goal assessment prior to the promotion and tenure decision. For established faculty, goal assessment generally occurred during the annual evaluation.

To help faculty detemine job directions, chairs first identified their own expectations and those of the institution. Chairs then encouraged faculty to define their areas of expertise, to indicate how they felt they could best contribute to the department, and to specify how they wanted to make their mark.

Chairpersons helped faculty identify their strengths and weaknesses and worked with them to promote the strengths and eliminate the weaknesses. By identifying the specific forms of development (e.g., toastmasters, campus instructional improvement opportunities, departmental mentoring), chairpersons provided faculty the opportunity for professional growth.

Support. Chairs viewed providing frequent encouragement and support as essential to keeping faculty vital and productive members of the department. Numerous approaches were cited by the chairpersons interviewed as effective means of enhancing faculty morale and performance. Foremost among these were providing adequate facilities, equipment, technicians, and graduate students. Demonstrating confidence in faculty and encouraging participation both within the department and at the college and university level were considered important for growth of both faculty and the department. Although participation in various departmental, college, and university activities was encouraged, chairpersons interviewed felt all faculty should be cautioned against over commitment to committee work. They also felt that committee assignments for new faculty should be limited.

Additional forms of assistance for new faculty included providing released time, encouraging and assisting participation in professional societies, assisting in grant writing and editing, and helping new faculty define research directions. Most department heads felt that assisting new faculty was extremely important, as evidenced by the following comment:

> In my view, they are the future of the department, and I feel that I can have a greater impact by putting the emphasis on the young people that are going to be the future. If a choice has to be made, I bank on new faculty.

When dealing with the older, unproductive, faculty member, some respondents indicated they encourage them to consider early retirement.

A few of the participants in the study counseled "stuck" faculty out of the academic environment. One department head commented:

> There comes a time when some faculty clearly know that their career is not going well. They know they're frustrated with research, and their teaching is not that good. I have actually worked with two of our faculty very recently to get them jobs outside the university. I usually try to work hard to get people out of the system as well as to improve them.

Additionally, the department chairs studied supported all faculty by removing obstacles and shouldering added responsibilities. One department head commented:

> I've assembled one of the best groups of scientists in the country....They can more productively spend their time doing science, and I can more productively spend my time helping them do it....That means keeping a lot of paper work off their desks.

Some department heads in the study indicated they support faculty by serving as mentors to their assistant professors or by appointing a senior faculty member to serve as a role model. Others encourage interactions with senior faculty on an informal basis.

Generally speaking, these department heads supported sabbaticals and research and development leaves for their faculty, particularly for their mid-career and senior faculty. In addition to supporting participation in sabbaticals and other leave programs, the chairpersons cited altering faculty appointments and helping the mid-career or senior faculty member, whose productivity has declined, focus on a new interest.

Several department heads indicated they promote change, whenever feasible, to encourage faculty vitality and productivity. The chairs in the study often support faculty by anticipating potential problems and initiaing change.

For the more vital and productive faculty member, "getting out of the way" was voiced by several department chairs as the best assistance. One department head commented:

> My basic philosophy...is to get out of the way and let them develop. Oftentimes that's more helpful than becoming actively involved.

All chairs viewed themselves as strong advocates of their faculty and of their department. Several department heads stated that they supported faculty by communicating frequently with the appropriate dean concerning their departmental and individual accomplishments and, simultaneously, determined the "mood" of the administration in matters relating to the department. One department head illustrated the importance of communicating department accomplishments to higher administration when he observed that "an informed dean is a supportive dean."

Evaluation. While chairs advocate frequent or continuous feedback to assist faculty professionally, a rigorous and comprehensive annual evaluation process was considered essential for the growth and development of faculty. Many department heads required their faculty to complete an evaluation form stating their activities for the year. They were also asked to list specific goals for the coming year for which they would then be held accountable.

Whitman and Weiss suggest that "...if there exists one conventional wisdom in the field of faculty evaluation it is that using multiple data sources is desirable" (1982, p. 2). Several chairs "distributed the burden of faculty evaluation" through the use of student evaluation for classroom instructors, peer evaluation or review, self evaluation, and exit interviews with graduating seniors.

Department heads identify and address problems throughout the year but often use the formal evaluation process to tackle major issues relating to faculty productivity. Most chairpersons in this study indicated that they schedule a formal meeting with each faculty member to discuss goals and accomplishments, strengths and weaknesses, specific problems and suggested remediation. Thus, the annual conference was often the springboard for initiating significant changes in faculty activity.

Merit salary decisions were closely tied to the evaluation process by department chairs. Most agreed that withholding salary increases for faculty who don't achieve rarely of itself promotes productivity. Several, however, use this practice. One department head suggested that "...it may not be effective, but it frees up additional funds for productive faculty."

Recognition. Finally, recognizing and rewarding faculty was viewed as a deterrent to faculty problems and a reinforcement for faculty productivity. Although strongly tied to the annual evaluation process, department heads reinforce faculty productivity throughout the year. One department head commented:

> If I have a faculty member who is extremely productive...I don't ignore the fact that they are doing a superior job except once a year. Pat them on the back. Publicly praise them. I think we have to encourage even those who are doing very, very well to continue to do so.

Forms of recognition used by the chairs were early promotion, salary increases, additional funding, appointment to "select" committees, and nomination for awards.

Implications and Recommendations

The implications of the findings combined with the limitations of the study suggest a need for further research in several areas. These needs relate primarily to the training and support of academic department chairpersons and include implications for institutional policy and practice.

The sample in this study was restricted to chairs from ten of the twelve North Central Region Land-Grant Colleges of Agriculture and may not be representative of all department chairpersons. Thus, research could be expanded to include chairpersons from other land-grant and nonlandgrant institutions, both public and private. In addition, the study was limited to the identification of behaviors used by chairpersons to assist faculty professionally. The research could also be expanded to include faculty perceptions of helpful chair behaviors.

Despite various frustrations associated with the role of academic department chair, most participants in this study gained sufficient personal satisfaction to continue in the role of chairperson. Some, however, were anticipating a return to faculty ranks. Research focusing on the special needs of chairs as they return to the ranks of faculty is also warranted.

While much has been accomplished in meeting the evolving development needs of faculty, attention to the state of the professoriate is especially critical today as environmental conditions in higher education continue to deteriorate (Schuster & Brown, 1985). Most of the chairpersons in this study had scant knowledge of the adult and career development literature. Both chairs and faculty would be advised to become more attuned to developmental literature and to methods of enhancing the growth and development of mid-career and senior faculty. Future research should explore ways in which chairpersons could effectively identify the unique needs of these faculty and assist them in developing or redirecting their talents so that they can continue to be vital, productive members of the department.

Furthermore, the results of this study suggest that chairpersons' effectiveness as faculty developers could be enhanced by stronger institutional support. In this regard, deans and other administrators in Colleges of Agriculture can assist chairpersons in their efforts to enhance the professional development of faculty. This assistance can be accomplished in several ways. First, institutions should select academic department heads based as much on their management qualifications as on their reputations as scholars. To help determine the prospective department head's management orientation, search committees should develop a series of questions to be used in the interview process to determine the candidate's approach to human resource management. In addition, the job announcement should reflect the value placed upon human resource management skills by the institution.

Next, the development of pre-service and in-service training directed toward faculty development and other issues confronting academic department chairs is warranted. One proven training ground is the North Central Region New Administrator's Workshop. Support for this or other similar activities is recommended. New chairperson orientation focusing on human resource management and involving deans, vice chancellors, experienced department heads, and administrative staff development experts is also suggested. Deans would be advised to cover university and college policies and procedures as part of this orientation process.

Finally, chairpersons should be evaluated for their efforts to successfully foster the professional development of faculty. Recognition of these efforts would demonstrate to both faculty and chairpersons the value that the institution places on faculty members and on their professional growth and development.

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Developing Management Skills of Academic Professionals

By Len Ainsworth

Texas Tech University

In the higher education setting, managers function in a variety of ways and with a variety of titles. While Vice Presidents for Finance or Academic Affairs are managers, so are deans and department chairpersons. Also, principal investigators, research team leaders, and graduate advisors perform specific management roles. Faculty members manage the time and efforts of large numbers of students in the learning process. The faculty also makes management decisions regarding curricula and professional and support personnel. A common thread in this variety of management roles is that the individuals involved are academic professionals. Much of what is called management training in other settings is missing in academia. Academic decision making traditionally depends upon the development of consensus of approaches among professionals, but typically few institutions have programs for developing needed skills.

At Texas Tech University, as in other institutions of higher education, we have a continuing turnover of academic professionals across the spectrum of positions with management responsibilities. Chairpersons, deans, advisors, etc. don't remain in their positions permanently. So, the development of consensus in decision making is complicated by changing players.

From *To Improve the Academy: Resources for Student, Faculty, and Institutional Development*, Vol. 7. Edited by J. Kurfiss, L. Hilsen, S. Kahn, M.D. Sorcinelli, and R. Tiberius. POD/New Forums Press, 1988.

Initiation

An associate vice-president for research, with prior service as a department chairman and associate dean, first suggested the need for a program to assist in developing academic leaders. He invited me, his counterpart in academic affairs, to help in developing a program. The idea grew as needs for better academic managers were discussed. In the usual academic tradition we looked at needs and goals expressed in professional writings. Institutions in such diverse places as South Africa and Thailand (Kapp and Kaewsonthi, 1982) and, more recently, the United Kingdom (Sizer, 1987) have noted similar needs and aims. We accepted meeting the need for improved human relationships as a primary goal.

Next, we approached the president with an outling plan for organizing a program for development of academic management skills. With his approval we then invited individuals who represented several levels of management within the University to serve as an Advisory Board. That advisory board team quickly expanded itself to include members from the adjacent Health Sciences Center (HSC). The team discussed needs and began to set sub-goals as foci for training activities. As the goal setting discussions developed, the group expanded itself again to include members from the regional campuses of the HSC. Within a few weeks and a few meetings we had gone from a conversation between two administrators to a formal structure with an Advisory Board of over a dozen participants and a target group of over 200. The Advisory Board, at an early meeting, declared a working definition of the target group as all those in the institution with titles of principal investigator as well as chairpersons and those with administrative or supervisory responsibilities in the academic chain.

The Advisory Board accepted its primary responsibilities as identifying needs, setting goals, developing approaches and supporting the program. The continuing involvement of members of the advisory team was a factor in sustaining the program.

Early in the discussions of the Advisory Board, someone suggested naming the effort the Academic Leadership Development Program. The name, by its acronym ALDP, soon became a part of the institutional jargon. The board asked for financial support for materials and operations, and for a part-time coordinator. We submitted a proposal and the intergovernmental personnel act, throught the State of Texas, provided small funding assistance over a two year period; in addition, the management of the two institutions (University and HSC) funded some support for an additional year. More importantly, perhaps, the board developed (more accurately, evolved) a structure for program delivery.

The Advisory Board of the ALDP reviewed a variety of approaches to leadership and management development, including commercially developed programs. For example, the Higher Education Management Institute (1978) materials developed through the American Council on Education which were applicable to some of the topics selected for study. There are many other training materials and many consultants for specific types of activities (such as time management) which would have addressed some of the needs. The Board rejected those approaches, however, in favor of increasing participation of local faculty. The depth of involvement of the advisory group was undoubtedly increased by the delivery system selected. The Board felt that active participation by a variety of people filling a variety of roles in the institution would motivate participants and help them internalize the management training.

Several faculty who had served as consultants to management made presentations to the Advisory Board. The Board decided that while representatives of management firms or consultants from other institutions would be used occasionally, their role was to be supplementary to the internal staff.

Program Design

The program was developed as a series of workshops. The Advisory Board sought to pursue the "balanced orientation between organizational process and outcome" noted by Whetten (1984). The Board discussed needs and named subgoals or topics for presentation. They also suggested learning objectives and possible instructors/developers for each topic or workshop. The two associate vice-presidents and the part-time coordinator served as an executive committee to facilitate the program. The executive group made agreements with the developers, usually campus faculty and administrators, for modules for the workshops. The developers held training sessions, when they considered it necessary, for those selected to conduct or assist with the activities. The developers/presenters were designated by the board as Leadership Associates. While one jokingly noted that the title and a half-dollar would get him a cup of coffee in the snack bar, the intent was to provide some recognition of individual efforts in the development program.

The Advisory Board assisted with publicizing each workshop. Generally, the developers and those trained as Associates conducted the workshop and obtained feedback from the participants for evaluation by the executive group.

Content

Selection of the content and means of dealing with content illustrated participative approaches to management training. We surveyed academic administrators throughout the institutions, and the Advisory Board established priorities for the needs identified. We developed training activities in the area of goal setting, communication skills, performance appraisal, time management, planning, motivation, and program evaluation. Budgeting, staffing, and team building were also included. For some of the areas our intent was to develop consensus among practicing professionals; for others it was to provide information. For yet others, the primary effort was to help participants develop understanding of different approaches to dealing with particular issues.

The executive group and the advisory board spent little time in debating the relative importance of the areas selected for study. We selected them becasuse of the expressed interest of the vice-presidents, deans, department chairpersons and directors of major programs and research projects who would be the potential participants.

The Advisory Board discussed probable learning objectives for each major area, and asked faculty members in the area to be studied to recommend developers/facilitators. The Board then developed an agreement with the person chosen, for that individual to identify resources and materials needed, and to prepare an instructional module for workshop presentations. The developer selected others to assist, if necessary, and held a preliminary session with the Advisory Board. While the developer generally conducted the workshops the content was sometimes provided by others with particular skills. In a presentation of a decision-making model, for example, three faculty members alternated in presenting segments to small groups over a time period of several weeks.

The sessions on budgeting and staffing were handled as policy seminars with formal presentations and question-and-answer follow-up. Day-to-day problems, policy direction and projections for the future were treated. Strong participation in these sessions reflected interest in the what and why of institutional policies and procedures. The University's General Counsel spent an afternoon working with chairpersons on legal issues. The chairs came away impressed with the necessity for attention to detail and due process to avoid procedural entanglement.

All topics were addressed through problem solving activities and with participant involvement. Participants practiced on interdependent tasks and developed understanding of the neeed for independent work as well. Rather than being exhorted "to do your best," managers worked on processes to develop specific goal-setting. For some this resulted in better ways to organize a variety and mixture of objectives and tasks. For one chairman a complex task beccame even more complicated. The chairman initiated a redesign of his departmental structure, and before long had representatives from his dean's office, the graduate dean and the academic affairs office involved in his effort. This short term demand for greater time involvement of higher echelon administrators was a predictable aspect of the goal-setting content.

A few administrators attended almost every workshop (perhaps they paid more attention to the time management module than the rest of us). At the other extreme were those who attended only the first session, even though they had opportunity at that meeting to suggest both content and instructional approaches. Perhaps the latter group expected similar presidential invitations, lunch and visiting notables for the subsequent sessions as were provided for the kickoff activity. Some participants used the workshop content to initiate further discussions with faculty. At least one presenter, for example, was called upon to discuss performance evaluation with two different faculty groups after his workshop presentation to the audience of administrators.

Results

Presenters and participants said they liked the program design. The Leadership Associates, chosen from among those identified as having some expertise in the selected areas of study, readily accepted involvement in the programs. Advisory Board members, in most cases, maintained voluntary involvement over each year of their service. Each workshop drew a respectable volunteer audience. At least twenty percent of the identified population voluntarily participated in each workshop, although persons attending varied from activity to activity.

External support for materials, consultant help and small honoraria to Leadership Associates ended after the second year of the program. The management of the two institutions provided partial support for the coordinator for an additional year. The Advisory Board continued its activities and volunteer presenters continued to provide workshops throughout the third year of the program.

Institutions, like growing companies, are dynamic. Professional personnel come to the institution from many places, at different times, and with varied backgrounds. The ALDP provided new opportunities for interaction among those professionals. The chairpersons of department, for example, responded well to forums in which they could exchange ideas. Participants also reported positively to the opportunities for informal interaction provided through the program. Chairmen from across the institutions worked, im many cases for the first time, with administrators in other colleges and schools, on activities of broad interest.

The coordinator reported progress in development of managerial skills, based upon workshops participants' responses to survey instruments. Specific results on information aspects of the program were not assessed.

A specific area of the program related to performance appraisal and faculty evaluation. Since this directly and indirectly affects all academic managers, it is understandable that participants asked for the topics to be addressed again during the second year of the program. As senior managers (e.g., academic vice-presidents) change, the philosophies and criteria surrounding personnel evaluations may change, and managers at lower levels may need perception checks. ALDP workshops gave chairpersons opportunities to work with deans and vice-presidents in reviewing information and in development of approaches and guidelines for appraisal. Department chairpersons responded as favorably to this topic in the second year as in the first. The value of team-building and developing institutional climate reported in various literature seemed to be confirmed in this real world experience.

Lessons Learned

The experiences of academic administrators at Texas Tech University over a three year period lead to several conclusions. The ALDP experience indicates that (1) administrators are interested in improving themselves as managers; (2) participative approaches to planning are confirmed as valuable; and (3) participants value opportunities for interaction. Significant topics were repeated at participants' requests and almost as many participated in the reruns as in the original workshops.

Not all results were completely positive; for example, some of the workshops drew criticism for lack of either depth or applicability to many of the participants. Although significant numbers of managers requested particular topics in the initial survey, some of the topics did not attract large numbers of participants. Further study should be undertaken to determine whether conflicting activities, lack of timing or notification, type of topic, presenters or other factors caused the lack of involvement in those programs.

The goal of "professional development of the incumbents" (academic administrators) has long been supported by prestigious groups, including the National Commission on Higher Education (1978), while staff development programs continue to be stressed and models proposed (Lucas, 1986). The value of one approach to improved managerial skills through voluntary professional development and through participative planning has been confirmed in the program at Texas Tech University.

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